



551 TAFT HWY | BAKERSFIELD, CA 93307

Phone (661) 831-0989

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July 1, 2023

**Consumer Confidence Report
For Calendar Year 2022**

Este informe contiene información muy importante sobre su agua potable. Por favor hable con alguien que lo pueda traducir.

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Type of water sources in use: Seven water wells.

1. Berkshire Well
2. Dublin Well
3. McKee Well
4. Panama Well
5. Taft Well
6. Bannock Well
7. East Berkshire Well

* Berkshire, Dublin, Taft, Bannock and East Berkshire Wells were pumped into the distribution system during 2022

* Panama Well was on stand-by and not pumped into the system during 2022.

* McKee Well was offline and not pumped into the system during 2022.

If you have any questions about this report or concerning your water utility, please contact **Nick Cooper, General Manager at (661) 831-0989 at 551 Taft Hwy, Bakersfield, CA 93307.**

If you want to learn more, please attend any of our regularly scheduled Board of Director meetings for public participation.

Meeting Location: District Office 551 Taft Hwy, Bakersfield, CA 93307

Meeting Time: Second Monday of each month, 6:00 PM



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Greenfield County Water District routinely monitors for constituents in your drinking water according to Federal and State laws. This report shows the results of our monitoring for the period of January 1, to December 31, 2022.

A source water assessment was conducted for the water supply wells of Greenfield County Water District water system in December, 2020. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: septic systems, fertilizer-pesticide/herbicide application, storm water detention facilities, auto repair shops, parks, and junk/scrap/salvage yards. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: automobile-gas stations, historic gas stations, and transportation corridors – freeway/state highways. A copy of the completed assessment may be viewed at the Greenfield County Water District office, 551 Taft Hwy, Bakersfield, CA 93307.

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 storm water 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 storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

In our continuing efforts to maintain a safe and dependable water supply, and to comply with State and Federal regulations, it may be necessary to make improvements to your water system. The costs may be reflected in the rate structures, because rate adjustments may be necessary in order to make these improvements. These improvements are sometimes reflected as rate structure adjustments. Thank you for your understanding.

The tables in this report 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.



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DEFINITIONS:

In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

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 (USEPA).

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.

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 Disinfecting 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 alone with their monitoring and reporting requirements, and water treatment requirements.

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.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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.

ND: Not detectable at testing limit.

ppm: Parts per million or milligrams per liter (mg/L).

ppb: Parts per billion or micrograms per liter (ug/L).

ppt: Parts per trillion or Nano grams per liter (ng/L).

ppq: Parts per quadrillion or pictogram per liter (pg/L).

PCi/L: Picocuries per liter (a measure of radiation).



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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
E. coli	(In the Year) 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

Contaminant and Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. of Sites Exceeding AL	AL	MCLG	Number of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead mg/L 7/2020	30	ND	0	.015	.02	0	(a)
Copper mg/L 7/2020	30	.100	0	1.3	0.3	0	(b)

(a) Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.

(b) Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Table 3 – Sampling Results for Sodium and Hardness

Chemical or Constituent and Sample Dates	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm) 2020 & 2022	39.80	30.8 - 54	None	None	Generally found in ground and surface water.
Hardness (ppm) 2020 & 2022	108.33	54 - 170	None	None	Generally found in ground and surface water.



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Table 4 – Detection of Contaminants with a Primary Drinking Water Standard

Chemical or Constituent	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2020 & 2022	ND	ND	1000	N/A	Erosion of natural deposits; residual from some surface water treatment processes.
Arsenic (ppb) Treated	2021 & 2022	6.89	2.41 – 9.70	10	N/A	Erosion of natural deposits; runoff from orchards, glass & electronics production wastes.
Barium (ppb)	2020 & 2022	72.5	ND - 150	1000	2000	Discharge of oil drilling wastes & from metal refineries; erosion of natural deposits.
Chromium (ppb)	2020 & 2022	ND	ND	50	2.5	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Fluoride (ppm)	2020 & 2022	0.17	0.15 – 0.22	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (N) (ppm)	2021 & 2022	2.51	0.27 – 4.0	10	N/A	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium (ppb)	2020 & 2022	0.88	ND – 3.2	50	50	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines & chemical manufacturers; runoff from livestock lots (feed additive).
Gross Alpha Activity (pCi/L)	2015, 2020, 2021 & 2022	1.79	ND – 3.18	15	0	Erosion of natural deposits.
Hexavalent Chromium (ppb)	1/13/2015	2.94	1.1 - 4.7	None	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
1,2,3-Trichloropropane (ppb)	2021 & 2022	0.0017	ND - .0044	.005	.0007	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover, and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides.

We routinely monitor for the presence of drinking water contaminants. Arsenic treatment plants were installed January 1, 2020. The treatment plants currently comply with all State and Federal drinking water requirements.



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

Chemical or Constituent	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2022 & 2022	ND	ND	1000	N/A	Erosion of natural deposits; residual from some surface water treatment processes.
Iron (ppb)	2020 & 2022	46.5	ND - 279	300	N/A	Leaching from natural deposits; industrial wastes.
Total Dissolved Solids (ppm)	2020 & 2022	259	160 - 390	1000	N/A	Runoff/leaching from natural deposits.
Turbidity (units)	2020 & 2022	0.58	ND – 1.5	5 units	N/A	Soil runoff.
Specific Conductance (micromhos)	2020 & 2022	388.50	260 - 526	1600	N/A	Substances that form ions when in water; seawater influence.
Chloride (ppm)	2020 & 2022	20.38	8.3 - 35	500	N/A	Runoff/leaching from natural deposits; seawater influence.
Sulfate (ppm)	2020 & 2022	32.33	14 - 53	500	N/A	Runoff/leaching from natural deposits; industrial wastes.

Table 6 – Disinfection By-products

	Sample Date	MCL	PHG	Violation	Highest Annual Average	Typical Source of Contaminant
Total Trihalomethanes (ppb)	7/7/2022	80	N/A	No	ND	By-products of drinking water chlorination.
Total Haloacetic Acids (ppb)	7/7/2022	60	N/A	No	ND	By-products of drinking water chlorination.

Table 7 – Disinfectants

Disinfectant	Sample Date	MRDL	Violation	Range	Average	Typical Source of Contaminant
Chlorine	2022	4	No	0.67 – 1.62	0.99	Drinking water disinfectant added for treatment.



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Health Effects

The State Water Resources Control Board, Division of Drinking Water 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 other circulatory problems. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such 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. Nitrate levels above 10mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

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. Greenfield County Water District 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 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 or at: <http://www.epa.gov/lead>.

E. coli/Fecal Coliform 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, some of the elderly, and people with severely-compromised immune systems.

All 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).

MCLs are set at very stringent levels. The MCLs are set such that out of every 10,000 or 1,000,000 people (depends upon how the MCL was developed) drinking 2 liters of water every day for a lifetime, only 1 of those people may experience the described health effect.

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 for infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

Please call our office if you have questions (661) 831-0989. We at Greenfield County Water District work continuously to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.