# ANNUAL WATER OUALITY REPORT 2021

Presented By City of Fowler

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



#### We've Come a Long Way

nce again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

#### Where Does My Water Come From?

The City of Fowler customers are fortunate because our underground water supply does not need to be treated for drinking. We have six well sites with in the city that supply our water. Our groundwater static level is on average 85 to 95 feet. The City water is tested every month to ensure water quality .

### Think Before You Flush!

Clushing unused or expired medicines can be harmful to your  $\Gamma$  drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of our waterways by disposing responsibly. To find a convenient drop-off location near you, please visit https://bit.ly/3IeRyXy.

#### How Long Can I Store Drinking Water?

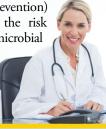
The disinfectant in drinking water will eventually dissipate even in a closed container. If that container housed bacteria prior to filling up with the tap water the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

### Important Health Information

Come people may be more vulnerable to contaminants )in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/

CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791

or online at: http://water.epa.gov/drink/ hotline.





# Safeguard Your Drinking Water

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals

that can reach your drinking water source.

- Pick up after your pets.
- If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA's Adopt Your Watershed to locate groups in your community.
- Organize a storm drain stenciling project with others in your neighborhood. Stencil a message next to the street drain reminding people: "Dump No Waste – Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

**OUESTIONS?** 

For more information about this report, or for any questions relating to your drinking water, please call Manuel Lopez, Public Works Superintendent, at (559) 834-3113.

# Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) 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. 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. 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 water poses a health risk.

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 can 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, that can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

# Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or online at: www.epa.gov/safewater/lead.



66 When the well is dry, we know the worth of water.

99

—Beniamin Franklin

### **Test Results**

Our water is monitored for many different kinds of substances on a very strict sampling schedule. And, the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The 1,2,3-Trichloropropane violation occurred in 2017 when the state changed the MCL threshold. We are currently in the planning stage for a filter system. Some people who drink water containing 1,2,3-trichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

| REGULATED SUBSTANCES   |                |        |                    |                          |                                |                   |                                |                   |  |   |   |  |  |  |
|--|----------------|--------|--------------------|--------------------------|--------------------------------|-------------------|--------------------------------|-------------------|--|---|---|--|--|--|
| SUBSTANCE<br>(UNIT OF MEASURE)   |                |        |                    | PHG<br>(MCLG)<br>[MRDLG] | AMOUNT<br>DETECTED             | RANGE<br>LOW-HIGH | VIOLATIC                       | ON TYPICAL SOURCE |  | RCE   |   |  |  |  |
| <b>1,1,1-Trichloroethane</b><br>(ppb)  |                | 20     | 19                 | 200                      | 1000                           | ND                | 48–160                         | No                | Disc   | charge fro  | om metal d  | egreasing sites and other factories; manufacture of food wrappings           |  |  |
| <b>1,2,3-Trichloropropane</b><br>[ <b>1,2,3-TCP</b> ] <sup>1</sup> (ppt)                                 |                | 2019 5 |                    | 0.7                      | 6                              | ND-0.0005         | Yes                            |                   | Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; cleaning and maintenance solvent, paint and varnish remover, and degreasing agent; byproduct from production of other compounds and pesticides |   |   |  |  |  |
| Arsenic (ppb)  |                | 20     | 19                 | 10                       | 0.004                          | 2.0               | ND-3.1                         | No                | Eros   | sion of na  | atural depo   | sits; runoff from orchards; glass and electronics production wastes          |  |  |
| Benzene (ppb)  |                | 20     | 19                 | 1                        | 0.15                           | ND                | 48–155                         | No                | Disc   | charge fro  | dyes and nylon factories; leaching from gas storage tanks and landfills |  |  |  |
| Dibromochloropropane<br>[DBCP] (ppt)   |                | 20     | 19                 | 200                      | 1.7                            | 0.043             | 13,000-87,000                  | No                |  | Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes and tree fruit |   |  |  |  |
| Ethylbenzene (ppb)   |                | 20     | 19                 | 300                      | 300                            | ND                | 70–130                         | No                | Disc   | charge fro  | om petrolei   | ım refineries; industrial chemical factories                                 |  |  |
| Fluoride (ppm)   |                | 20     | 19                 | 2.0                      | 1                              | ND                | ND-0.15                        | No                |  | Erosion of natural deposits;<br>aluminum factories  |   | ts; water additive that promotes strong teeth; discharge from fertilizer and |  |  |
| Nitrate [as nitrate] (ppm)   |                | 2021   |                    | 45                       | 45                             | 1.3               | 0.23–120                       | No                | Runoff and deposits  |   | eaching fro   | om fertilizer use; leaching from septic tanks and sewage; erosion of natural |  |  |
| Turbidity <sup>2</sup> (NTU)   |                | 2019   |                    | ΤT                       | NA                             | 3.9               | 0.1–3.9                        | No                | No Soil r  |   |   |  |  |  |
| Tap water samples were collected for lead and copper analyses from sample sites throughout the community |                |        |                    |                          |                                |                   |                                |                   |  |   |   |  |  |  |
| SUBSTANCE YEAR<br>(UNIT OF MEASURE) SAMPLE   |                |        | PHG<br>D AL (MCLG) |                          | AMOUNT DETECTED<br>(90TH %ILE) |                   | SITES ABOVE AL/<br>TOTAL SITES |                   | DLATION  | LATION TYPICAL SOURCE   |   |  |  |  |
| Copper (ppm)   | 202            | 1      | 1.3                | 0.3                      |                                | 0                 | 0/20                           |                   | No   | Internal corrosion<br>wood preservatives  |   | of household plumbing systems; erosion of natural deposits; leaching from    |  |  |
| Lead (ppb)   | ead (ppb) 2021 |        | 15                 | 0.2                      |                                | 0                 | 0/20                           |                   | No   | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits                       |   |  |  |  |
| SECONDARY SUBSTANCES   |                |        |                    |                          |                                |                   |                                |                   |  |   |   |  |  |  |
| SUBSTANCE (UNIT OF MEASURE)  |                | , ,    | YEAR S             | AMPLED                   | SMCL                           | PHG (MCLG)        | AMOUNT DETECT                  | ED RA             | NGE LOW-   | HIGH V  | /IOLATION   | TYPICAL SOURCE   |  |  |
| Iron (ppb)   |                | 2      |                    | 019                      | 300                            | NS                | NS ND                          |                   | ND-75  | 0   | No  | Leaching from natural deposits; industrial wastes                            |  |  |
| Manganese (ppb)  |                | 2      |                    | 019                      | 50                             | NS 21,0           |                                | 85                | ,000–115   | 5,000   | No  | Leaching from natural deposits   |  |  |
| Odor-Threshold (TON)   |                |        | 20                 | )19                      | 3                              | NS                | ND                             |                   | ND-1.(   | 0   | No  | Naturally occurring organic materials  |  |  |
| Sulfate (ppm)  |                |        | 20                 | 019                      | 500                            | NS 14             |                                | 0.5–50            |  | 0   | No  | Runoff/leaching from natural deposits; industrial wastes                     |  |  |
| Turbidity (NTU)  |                |        | 2019               |                          | 5                              | NS                | 0.14                           |                   | 0.1–3.9  | )   | No  | Soil runoff  |  |  |
| Zinc (ppm)   |                |        | 2019               |                          | 5.0                            | NS                | ND                             |                   | 0.05–5   |   | No  | Runoff/leaching from natural deposits; industrial wastes                     |  |  |

<sup>1</sup>This substance had a notification level (NL) of 5 ppt until December 14, 2017, when the MCL of 5 ppt became effective.

<sup>2</sup>Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

## What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef.

According to the U.S. EPA, the average American uses over 180 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world

allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet; twice the global per capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish.

To check out your own water footprint, go to www.watercalculator.org.

## **Table Talk**

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

#### Other Table Information Worth Noting

Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.



**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

**MCL (Maximum Contaminant Level):** 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 (SMCLs) are set to protect the odor, taste and appearance of drinking water.

**MCLG (Maximum Contaminant Level Goal):** 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. EPA.

**MRDL (Maximum Residual Disinfectant Level):** 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.

#### MRDLG (Maximum Residual Disinfectant Level Goal):

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.

#### NA: Not applicable

**ND (Not detected):** Indicates that the substance was not found by laboratory analysis.

#### NS: No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**PDWS (Primary Drinking Water Standard):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**PHG (Public Health Goal):** 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 EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**ppt (parts per trillion):** One part substance per trillion parts water (or nanograms per liter).

TON (Threshold Odor Number): A measure of odor in water.

