# 2023 Water Quality Report

#### Jennings System-5010044



This report contains important information about your drinking water. If the report is not available in your native language, we encourage you to identify someone who understands it and can translate for you.

Este informe contiene información muy importante sobre su agua potable. Favor de comunicarse con el Departamento de Utilidades, División de Servicios de Agua al 209-342-2246 para asistirlo en español.

The City of Modesto is pleased to report that we meet all United States Environmental Protection Agency (USEPA) standards for safety. City staff works diligently to supply a clean, reliable drinking water source while complying with emerging environmental issues and drinking water regulations.

In accordance with the USEPA and California regulations under the Safe Drinking Water Act, water utilities are required to provide detailed water quality information to their consumers annually in the form of a Consumer Confidence Report (CCR).

In accordance with the requirements of Title II of the Americans with Disabilities Act ("ADA") of 1990, the Fair Employment & Housing Act ("FEHA"), the Rehabilitation Act of 1973 (as amended), Government Code section 11135 and other applicable codes, the City of Modesto ("City") will not discriminate against individuals based on disability in the City's services, programs, or activities. For more information, please visit the City of Modesto website at <a href="https://www.modestogov.com/865/Americans-with-Disabilities-Act-ADA">https://www.modestogov.com/865/Americans-with-Disabilities-Act-ADA</a>

#### **Contact Us:**

Water Services Division, PO Box 642, Modesto, CA 95353

Field Services, Water Conservation, Water Quality, and Emergencies:

209-342-2246 Utility Billing, Payment, Service on/off: 209-577-5395

#### Water Quality Information



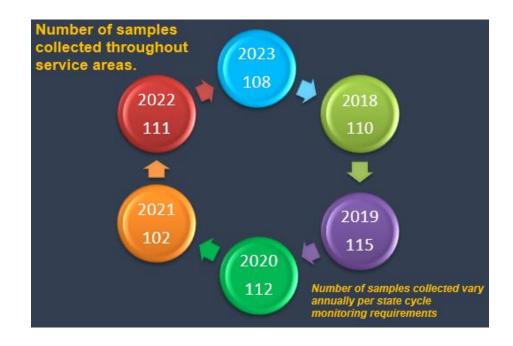
#### Water Quality Sampling

The City of Modesto takes pride in the quality of potable water it provides to its customers. To ensure the highest water quality, water is tested from both the well and distribution points throughout the service area. On an annual basis, City staff collect an average of 110 water samples and test for approximately 170 chemicals as required by the State.

For more detailed information please (refer to pages 11-12), where we have provided you with a table showing what type of chemicals have been found in the water, the results of those samples, and the State MCLs (Maximum Contaminant Levels).

# **Cross-Connection Control Program**

The purpose of the cross-connection control program is to reduce the hazards of contamination to the public water system by identifying actual and potential cross connections and acting to protect the system from these hazards. This is accomplished by installing approved backflow prevention assemblies where hazards are identified; or ensuring that water-using equipment on the premises is installed in accordance with plumbing code requirements and good practice. To keep your drinking water safe, the City's Cross-Connection specialist surveys the system to guarantee compliance with cross connection/backflow requirements. The City ensures all primary external backflow prevention assemblies are tested annually. In 2023, seven (7) backflow assemblies were tested throughout the service area.



# Water Distribution System Flushing

Route flushing of the water distribution system is performed by City of Modesto crews to clear out the buildup of naturally occurring particles within the distribution system, which can cause common water quality problems like taste, odor, and discoloration. These fine particles, which do not pose a health concern, settle in pipes during periods of low flow velocities. When water consumption increases, the higher velocities pick up the settled particles, causing the water to become cloudy and appear stained or dirty. Usually these high velocities are seasonal and occur during summer months. As consumption rises, more of the off-season accumulation is picked up from the pipes and may enter the customer's tap.

Prior to the flushing event, customers will be notified via door hangers or flyers 48 hours in advance. Customers should also watch for road signs in their neighborhood. During flushing events, properties in the immediate area of the water main flushing may experience low water pressure, sand, and discoloration of water. It is recommended that you avoid running taps and using washing machines or dishwashers during time of flushing.

If you experience discolored water, we ask that *after the flushing event has been completed*, you flush your water service by opening your outdoor hose bib for several minutes as needed until the water clears. Afterwards, flush cold-water faucets inside your home for several minutes. Do not run a tap that has a water filter connected to it as sedimentation may clog the filter. If discolored water continues, contact the Water Division.

City of Modesto is determined to dispose or reuse the flushed water in a method that is environmentally sound and improves drinking water quality in the process.

For more information, contact the Utilities Department, Water Services Division at 209-342-2246.



#### **USEPA and the State Water Resources Control Board**



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

Water taste can vary within the water system depending on the age of pipes, minerals in the water, time of year, the percentage of well water mixing with surface water and the process of disinfection.

#### The State Water Resources Control Board requires us to inform you that:

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 USEPA'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. USEPA/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.

#### **Contaminant Information**

#### **Possible Causes of Contamination**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater. 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, which 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**, which 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**, that can be naturally occurring or be the result of oil and gas production or mining activities.

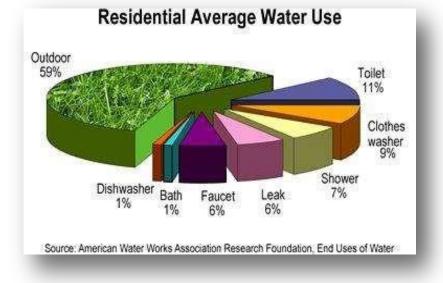
More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.



# Water Conservation

Water is a critical part of California's way of life. Our economy, our environment and our day-to-day lifestyle need water to flourish. The good news...it is easy to keep saving! There are lots of simple ways to reduce the amount of water that we use at home, both inside and outside.

# Water Conservation Tips



For information on the watering schedule, go to the link below: <a href="https://www.modestogov.com/915/Watering-Schedule">https://www.modestogov.com/915/Watering-Schedule</a>

- Check household faucets for leaks. A faucet with even a slow drip can waste 10 to 25 gallons of water. Just think, 15 drips per minute add up to almost 3 gallons of water wasted per day.
- Keep showers to 5 minutes or less in length. A five-minute shower can use 10 to 25 gallons of water.
- Use a broom to sweep your driveway, garage, or sidewalk instead of using water.
- Water your lawn in the evening or in the early morning to avoid evaporation.
- Make seasonal adjustments to your irrigation timers.
- Use water only when you need it. Do not leave water running; be sure to turn it off when you are finished.
- Do not water outdoors during and up to 48 hours following measurable rain.

# **Fun Water Facts**

- Without water, the earth would look like the moon.
- All living things need water to live. People can live several weeks without food, but only a few days without water.
- Water makes up 83% of our blood, 70% of our brain, and 90% of our lungs. Overall, our bodies are 70% water.
- A tomato is about 95% water. An apple, a pineapple, and an ear of corn are each 80% water.
- Much more fresh water is stored under the ground in aquifers than on the earth's surface.
- While the daily recommended amount of water is eight cups per day, not all this water must be consumed in the liquid form. Nearly every food or drink item provides some water to the body.





# The City of Modesto offers the following rebate programs:

- Turf Replacement
- Toilet
- Washing Machine
- Smart Irrigation Controllers
- Drip Irrigation



The City of Modesto has programs to assist customers with Water Conservation including the *Free* home water wise consultations. Customers can call and schedule an appointment for a trained conservation specialist to come to their home, analyze their outdoor water use and assist them to conserve water by demonstrating how to read the meter, reset watering timers, and check for leaks.

For more information, please go to the link:

http://www.modestogov.com/905/Water-Conservation









# **Table Introduction**

#### **Definition of Terms:**

**AL (action level):** The concentration of a contaminant that, 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 feasible using the best available treatment technology. Secondary MCLs 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/expected health risk. MCLGs allow for a margin of safety.

**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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

**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 Environmental Protection Agency's Office of Environmental Health Hazard Assessment without regard to cost or available detection and treatment technologies.

**TT (treatment technique):** A required process intended to reduce the level of a contaminant in drinking water.

**NL (notification level):** A health based advisory level for an unregulated contaminant in drinking water utilized by the Department of Drinking Water to provide guidance to drinking water systems.

# **Comparative Figures for Interpretation**

| 1 ррв                       | 1 ррт  |  |  |  |
|-----------------------------|--|--|--|--|
| 1 second in 31.7<br>years   | 1 second in 317.1 centuries  |  |  |  |
| 1 penny of<br>\$10,000,000  | 1 penny of<br>\$10,000,000,000   |  |  |  |
| 1 inch of 15,782.8<br>miles | 1 inch of 657.6 trips around the equator   |  |  |  |
| 1 minute in 19<br>centuries | 1 minute in 1,900<br>millenniums   |  |  |  |
| 1 ounce in 31,250<br>tons   | 1 ounce in 31,250,000<br>tons  |  |  |  |
|                             | 1 second in 31.7<br>years<br>1 penny of<br>\$10,000,000<br>1 inch of 15,782.8<br>miles<br>1 minute in 19<br>centuries<br>1 ounce in 31,250 |  |  |  |

Source: American Water Works Association Research Foundation

# Abbreviations:

DLR: detection limit for reporting cfu/ml: colony forming units mg/L: number of milligrams in one liter of water n/a: not applicable NTU: nephelometric turbidity units pCi/L: picocuries per liter (a measure of radiation) ppb: parts per billion ppm: parts per millime ppt: parts per trillion TT: treatment technique ND: non-detect µS/cm: micro-siemens/cm <: less than >: greater than LRAA: locational Running Annual Average

# 2023 Water Quality Table

#### **Regulated Contaminants with Primary MCLs**

The data presented are from the most recent monitoring done in compliance with regulations.

| Inorganic Chemicals       | UNITS  | MCL | PHG   | DLR | AVG  | RANGE | Year<br>Sampled | VIOLATION | TYPICAL SOURCE OF CONTAMINANTS  |
|---------------------------|--------|-----|-------|-----|------|-------|-----------------|-----------|---|
| Arsenic                   | ppb    | 10  | 0.004 | 2   | 6.3  | n/a   | 2022            | No        | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes. |
| Bacteriological           | UNITS  | MCL | PHG   | DLR | AVG  | RANGE | Year<br>Sampled | VIOLATION | TYPICAL SOURCE OF CONTAMINANTS  |
| Heterotrophic Plate Count | cfu/ml | n/a | n/a   | n/a | 0.20 | 0-2   | 2023            | No        | n/a   |

#### **Disinfection Byproducts and Disinfection Residuals**

| Disinfection Byproducts | UNITS | MCL  | PHG   | DLR | LRAA | RANGE     | Year<br>Sampled | VIOLATION | TYPICAL SOURCE OF CONTAMINANTS                   |
|-------------------------|-------|------|-------|-----|------|-----------|-----------------|-----------|--|
| Trihalomethanes (Total) | ppb   | 80   | n/a   | n/a | 1.5  | 0-2.95    | 2023            | No        | By-product of drinking water disinfection.       |
| Disinfectant Residual   | UNITS | MRDL | MRDLG | DLR | AVG  | RANGE     | Year<br>Sampled | VIOLATION | TYPICAL SOURCE OF CONTAMINANTS                   |
| Chlorine                | mg/L  | 4    | 4     | n/a | 1.35 | 0.48-1.94 | 2023            | No        | Drinking water disinfectant added for treatment. |

#### **Special Notifications:**

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 costs 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.

#### **Regulated Contaminants with Secondary MCLs**

The data presented are from the most recent monitoring done in compliance with regulations.

| Inorganic Chemicals    | Units | Standard | PHG | DLR | AVG  | Range | Year<br>Sampled | Violation | TYPICAL SOURCE OF CONTAMINANTS                                 |
|------------------------|-------|----------|-----|-----|------|-------|-----------------|-----------|--|
| Chloride               | ppm   | 500      | n/a | n/a | 660  | n/a   | 2022            | No        | Runoff and leaching from natural deposits; seawater influence. |
| Manganese              | ppb   | 50       | n/a | n/a | 320  | n/a   | 2022            | No        | Leaching from natural deposits.                                |
| Specific Conductance   | uS/cm | 1600     | n/a | n/a | 3000 | n/a   | 2022            | No        | Substances that form ions when in water; seawater influence.   |
| Sulfate                | ppm   | 500      | n/a | n/a | 460  | n/a   | 2022            | No        | Runoff/leaching from natural deposits; industrial wastes.      |
| Total Dissolved Solids | ppm   | 1000     | n/a | n/a | 1900 | n/a   | 2022            | No        | Runoff/leaching from natural deposits.                         |
| Turbidity              | NTU   | 5        | n/a | n/a | 0.24 | n/a   | 2022            | No        | Soil runoff.   |

# Additional Inorganic Chemicals

The data presented are from the most recent monitoring done in compliance with regulations.

| Inorganic Chemicals | Units | MCL | PHG | DLR | AVG | Range | Year<br>Sampled | Violation | TYPICAL SOURCE OF CONTAMINANTS |
|---------------------|-------|-----|-----|-----|-----|-------|-----------------|-----------|--------------------------------|
| Hardness (as CaCO3) | ppm   | n/a | n/a | n/a | 409 | n/a   | 2022            | No        | n/a                            |
| рН                  | units | n/a | n/a | n/a | 7.9 | n/a   | 2022            | No        | n/a                            |
| Sodium              | ppm   | n/a | n/a | n/a | 460 | n/a   | 2022            | No        | n/a                            |

# At the Tap Contaminants

| Metals | UNITS | ACTION<br>LEVEL | PHG | DLR  | # OF<br>SAMPLES | 90 <sup>™</sup><br>Percentile | Year<br>Sampled | #SAMPLES><br>ACTION LIMITS | TYPICAL SOURCE OF CONTAMINANTS   |
|--------|-------|-----------------|-----|------|-----------------|-------------------------------|-----------------|----------------------------|--|
| Copper | ppm   | 1.3             | 0.3 | 0.05 | 5               | 0.145                         | 2023            | 0                          | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.                     |
| Lead   | ppb   | 15              | 0.2 | 5    | 5               | ND                            | 2023            | 0                          | Internal corrosion of household water plumbing systems;<br>discharges from industrial manufacturers; erosion of natural<br>deposits. |