ANNUAL WATER QUALITY REPORT

Reporting Year 2022

Presented By
City of Wasco
Water Department

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

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety 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. Please remember that we are always available should you ever have any questions or concerns about your water.

Important Health Information

Nitrate in drinking water at levels above 10 parts per million (ppm) 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 a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 ppm 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. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Some 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 http://water.epa.gov/drink/hotline.

Violation Information

The State Board has recently begun regulating 1,2,3-trichloropropane (1,2,3-TCP) and set the maximum contaminant level (MCL) at 0.005 microgram per liter, or 5 parts per trillion (ppt). This is a new requirement for drinking water standards. The city will continue to sample for 1,2,3-TCP monthly to monitor the levels and report to the state.

To mitigate this concern, the City of Wasco is aggressively working toward drilling four new wells throughout the city to continue to provide clean drinking water. 1,2,3-TCP levels will gradually improve over time as new wells are constructed. We anticipate completely resolving the problem within four years, and your patience regarding this matter is appreciated. Currently the city is identifying sites to drill new wells and will treat Well 12 on-site.

Some people who drink water containing 1,2,3-TCP in excess of the MCL over many years may have an increased risk of getting cancer.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Alberto Martinez, Public Works Director of Water Utilities, at (661) 758-7271.
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 two 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 at www.epa.gov/safewater/lead.

Where Does My Water Come From?

The source of Wasco's drinking water is a system of groundwater wells in the Kern County sub-basin. The aquifer is replenished through natural runoff from the Sierra Nevada Mountains as well as seepage from the many irrigation canals that import water into the area from other regions of the state. The City of Wasco owns and operates your domestic water supply and distribution systems. The water system is comprised of six active groundwater wells and approximately 94 miles of distribution lines.
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.

### REGULATED SUBSTANCES

<table>
<thead>
<tr>
<th>SUBSTANCE SUBSTANCES [UNIT OF MEASURE]</th>
<th>YEAR SAMPLED</th>
<th>MCL [MRDL]</th>
<th>PHG [MCLG] [MRDLG]</th>
<th>ANNUAL AVERAGE AMOUNT DETECTED</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3-Trichloropropane [1,2,3-TCP] (ppt)</td>
<td>2022</td>
<td>5[1]</td>
<td>0.7</td>
<td>27.7</td>
<td>ND–120</td>
<td>Yes</td>
<td>Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; cleaning and maintenance solvent, paint and varnish remover, and degreasing agent; by-product of production of other compounds and pesticides</td>
</tr>
<tr>
<td>Arsenic (ppb)</td>
<td>2022</td>
<td>10</td>
<td>0.004</td>
<td>1.92</td>
<td>ND–2.7</td>
<td>No</td>
<td>Erosion of natural deposits; runoff from orchards; glass and electronics production wastes</td>
</tr>
<tr>
<td>Chlorine (ppm)</td>
<td>2022</td>
<td>[4.0 (as Cl2)]</td>
<td>[4 (as Cl2)]</td>
<td>0.67</td>
<td>0.20–1.88</td>
<td>No</td>
<td>Drinking water disinfectant added for treatment</td>
</tr>
<tr>
<td>Dibromochloropropane [DBCP] (ppt)</td>
<td>2022</td>
<td>200</td>
<td>3</td>
<td>14</td>
<td>ND–27</td>
<td>No</td>
<td>Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit</td>
</tr>
<tr>
<td>Gross Alpha Particle Activity (pCi/L)</td>
<td>2022</td>
<td>15</td>
<td>(0)</td>
<td>2.18</td>
<td>ND–3.41</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrate [as nitrogen] (ppm)</td>
<td>2022</td>
<td>10</td>
<td>10</td>
<td>9.12</td>
<td>0.46–11</td>
<td>No</td>
<td>Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits</td>
</tr>
<tr>
<td>Radium 228 (pCi/L)</td>
<td>2022</td>
<td>5</td>
<td>0.019</td>
<td>0.697</td>
<td>0.644–0.751</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>TTHMs [total trihalomethanes]–Stage 2 (ppt)</td>
<td>2021</td>
<td>80</td>
<td>NA</td>
<td>1.75</td>
<td>ND–3.5</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

<table>
<thead>
<tr>
<th>SUBSTANCE [UNIT OF MEASURE]</th>
<th>YEAR SAMPLED</th>
<th>AL</th>
<th>PHG (MCLG)</th>
<th>AMOUNT DETECTED (90TH %ILE)</th>
<th>SITES ABOVE AL/TOTAL SITES</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (ppm)</td>
<td>2020</td>
<td>1.3</td>
<td>0.3</td>
<td>0.017</td>
<td>0/32</td>
<td>No</td>
<td>Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>2020</td>
<td>15</td>
<td>0.2</td>
<td>1</td>
<td>1/32</td>
<td>No</td>
<td>Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits</td>
</tr>
</tbody>
</table>

### Definitions

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.

NS: No standard.

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

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).

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.
What type of container is best for storing water?

Consumer Reports has consistently advised that glass or BPA-free plastics such as polyethylene are the safest choices. To be on the safe side, do not use any container with markings on the recycle symbol showing 7PC (that’s code for BPA). You could also consider using stainless steel or aluminum with BPA-free liners.

How much emergency water should I keep?

Typically, one gallon per person per day is recommended. For a family of four, that would be 12 gallons for three days. Humans can survive without food for one month but can only survive one week without water.

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 can be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

How long does it take a water supplier to produce one glass of treated drinking water?

It can take up to 45 minutes to produce a single glass of drinking water.

How many community water systems are there in the U.S.?

About 53,000 public water systems across the United States process 34 billion gallons of water per day for home and commercial use. Eighty-five percent of the population is served by these systems.

Which household activity wastes the most water?

Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40 percent of total water use). Toilets use about 4 to 6 gallons per flush, so consider an ultra-low-flow (ULF) toilet, which requires only 1.5 gallons.

<table>
<thead>
<tr>
<th>SUBSTANCE (UNIT OF MEASURE)</th>
<th>YEAR SAMPLED</th>
<th>SMCL</th>
<th>PHG (MCLG)</th>
<th>ANNUAL AVERAGE AMOUNT DETECTED</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific Conductance (µS/cm)</td>
<td>2021</td>
<td>1,600</td>
<td>NS</td>
<td>256</td>
<td>152–470</td>
<td>No</td>
<td>Substances that form ions when in water; seawater influence</td>
</tr>
</tbody>
</table>

1 This substance had a notification level of 5 ppt until December 14, 2017, when the MCL of 5 ppt became effective.

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**By the Numbers**

- The number of Olympic-sized swimming pools it would take to fill up all of Earth’s water: **800 TRILLION**
- The average cost in cents for about 5 gallons of water supplied to a home in the U.S.: **1**
- The percent of Earth’s water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers: **99**
- The average daily number of gallons of total home water use for each person in the U.S.: **50**
- The percent of Earth’s surface that is covered by water: **71**
- The amount of water on Earth in cubic miles: **330 MILLION**
- The percent of the human brain that contains water: **75**