Where Does My Water Come From?

The City of Wasco owns and operates your domestic water supply and distribution systems. The water system is comprised of six (6) active ground water wells and approximately 94 miles of water distribution lines. The City of Wasco is preparing its Source Water Assessment Plan (SWAP) to ensure that the water your household receives meets all required standards. As in years past, we are pleased to present our annual water quality report. As in years past, we are pleased to present our annual water quality report. We encourage you to share your thoughts with us on the report, or for any questions relating to your drinking water. For more information about this report, or for any questions relating to your drinking water, please call Water Superintendent Jeff Tackett at (503) 229-0100.

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 other substances resulting from the presence of animals or from human activity. To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (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. 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, which may come from sewers, manure-contaminated surface waters, septic systems, agricultural livestock operations, and wildlife;
- Inorganic Contaminants, such as salts and metals, which 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, which 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, which 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.

Important Health Information

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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.
Quality First

Once again, we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all of our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Important Health Information

Nitrate in drinking water at levels above 45 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 45 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.

Where Does My Water Come From?

The source of Wasco’s drinking water is the Kern County Subbasin, which is pumped to the surface by a system of ground water wells. The aquifer is replenished through natural runoff from the Sierra Nevada Mountains, as well as through 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 (6) active ground water wells and approximately 94 miles of water distribution lines.

Source Water Assessment

A Source Water Assessment Plan (SWAP) was completed in 2002 and is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water supply’s susceptibility to contamination by the identified potential sources. If you would like to review the Source Water Assessment Plan, please feel free to contact our office during regular office hours.

Community Participation

The City Council meets every first and third Tuesday of the month, beginning at 6:00 p.m., at the Council Chambers, 746 8th Street, Wasco, California. The public is welcome to attend.
## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily 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.

We participated in the 3rd stage of the EPA’s Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

### REGULATED SUBSTANCES

<table>
<thead>
<tr>
<th>SUBSTANCE (UNIT OF MEASURE)</th>
<th>YEAR SAMPLED</th>
<th>MCL [μG/L]</th>
<th>PHG (μG/L)</th>
<th>AMOUNT DETECTED [ARTIFICIAL]</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (ppb)</td>
<td>2016</td>
<td>10</td>
<td>0.004</td>
<td>2.3</td>
<td>2.0–2.6</td>
<td>No</td>
<td>Erosion of natural deposits; runoff from orchards, glass and electronics production wastes</td>
</tr>
<tr>
<td>Barium (ppm)</td>
<td>2016</td>
<td>1</td>
<td>2</td>
<td>0.05</td>
<td>0.04–0.07</td>
<td>No</td>
<td>Discharges of oil drilling wastes and from metal refineries, erosion of natural deposits</td>
</tr>
<tr>
<td>Dichloromethane (ppm)</td>
<td>2017</td>
<td>200</td>
<td>1.7</td>
<td>22.2</td>
<td>ND–61</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 rose fruit</td>
</tr>
<tr>
<td>FeColiform and E. coli ( nº positive samples)</td>
<td>2017</td>
<td>a routine sample and a repeat sample are also coliform positive, and one of these is also fecal coliform or E. coli positive</td>
<td>(0)</td>
<td>0</td>
<td>NA</td>
<td>No</td>
<td>Human and animal fecal waste</td>
</tr>
<tr>
<td>Gross Alpha Particle Activity (pCi/L)</td>
<td>2017</td>
<td>15</td>
<td>(0)</td>
<td>ND</td>
<td>NA</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Halocarbon Acids (ppb)</td>
<td>2017</td>
<td>60</td>
<td>NA</td>
<td>0.5</td>
<td>ND–1.3</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Hexavalent Chromium (ppm)</td>
<td>2017</td>
<td>10</td>
<td>0.02</td>
<td>3.8</td>
<td>3.1–4.5</td>
<td>No</td>
<td>Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refinery manufacturing, facilities; erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrates [as nitrate] (ppm)</td>
<td>2017</td>
<td>45</td>
<td>45</td>
<td>28</td>
<td>10.6–44</td>
<td>No</td>
<td>Runoff and leaching from fertilizer use; leaching from septic tanks and septic systems; erosion of natural deposits</td>
</tr>
<tr>
<td>Nitrates [as nitrogen] (ppm)</td>
<td>2017</td>
<td>10</td>
<td>10</td>
<td>6.4</td>
<td>2.4–10</td>
<td>No</td>
<td>Runoff and leaching from fertilizer use; leaching from septic tanks and septic tanks; erosion of natural deposits</td>
</tr>
<tr>
<td>Total Chlorine Residual (ppm)</td>
<td>2017</td>
<td>[4.0 (as Cl2)]</td>
<td>[4.0 (as Cl2)]</td>
<td>0.6</td>
<td>0.02–1.25</td>
<td>No</td>
<td>Drinking water disinfectant added for treatment</td>
</tr>
<tr>
<td>TTHM (Total Trihalomethanes) (ppm)</td>
<td>2017</td>
<td>80</td>
<td>NA</td>
<td>4.8</td>
<td>ND–10</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.

### SECONDARY SUBSTANCES

<table>
<thead>
<tr>
<th>SUBSTANCE (UNIT OF MEASURE)</th>
<th>YEAR SAMPLED</th>
<th>SMCL</th>
<th>PHG (μG/L)</th>
<th>AMOUNT DETECTED</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (ppb)</td>
<td>2017</td>
<td>1.3</td>
<td>0.031</td>
<td>0.032</td>
<td>No</td>
<td>Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives</td>
<td></td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>2017</td>
<td>1.2</td>
<td>1.7</td>
<td>0.32</td>
<td>No</td>
<td>Internal corrosion of household plumbing systems; discharge from industrial manufacturers; erosion of natural deposits</td>
<td></td>
</tr>
</tbody>
</table>

### UNREGULATED AND OTHER SUBSTANCES *

<table>
<thead>
<tr>
<th>SUBSTANCE (UNIT OF MEASURE)</th>
<th>YEAR SAMPLED</th>
<th>AMOUNT DETECTED</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2,3-Trichloropropane (ppm)</td>
<td>2017</td>
<td>62.7</td>
<td>22–93</td>
<td>No</td>
<td>TCP detections in the Central Valley of California are being attributed to past use of soil fumigants to battle nematodes</td>
</tr>
<tr>
<td>Hardness (ppm)</td>
<td>2016</td>
<td>83.2</td>
<td>72–100</td>
<td>Generally found in ground and surface water</td>
<td></td>
</tr>
<tr>
<td>Sodium (ppm)</td>
<td>2016</td>
<td>35</td>
<td>32–40</td>
<td>Generally found in ground and surface water</td>
<td></td>
</tr>
<tr>
<td>Spilnadian anion (μg/L)</td>
<td>2016</td>
<td>424</td>
<td>290–655</td>
<td>Substance that is not toxic in water; seawater influence</td>
<td></td>
</tr>
</tbody>
</table>

* There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2007.

**Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where contaminants occur and whether the contaminants need to be regulated.

### Definitions

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

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

- **NS:** No standard

- **pCi/L (picocuries per liter):** A measure of radioactivity.

- **PHG (Primary Drinking Water Standard):** 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.

- **pp (parts per billion):** One part per billion equals one part per hundred million (or micrograms per liter).

- **ppm (parts per million):** One part per million equals one part per ten million (or micrograms per liter).

- **ppt (parts per trillion):** One part per trillion equals one part per million parts (or nanograms per liter).

### BY THE NUMBERS

- The number of gallons of water produced daily by public water systems in the U.S.
- The amount of money spent annually on maintaining the public water infrastructure in the U.S.
- The number of Americans who receive water from a public water system.
- The age in years of the world’s oldest water found in a mine at a depth of nearly two miles.

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

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### 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 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 or at www.epa.gov/lead.