Water Quality Results

At the City of Camas we understand how important it is to ensure the quality of the water we provide. The health of our consumers and their families is paramount, therefore our goal is to provide you with a safe and dependable supply of drinking water. We work diligently to provide top quality water to a residential population of 20,320.

Our drinking water is safe and surpasses all State and Federal health standards.

We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life, and our children's future. This report provides a summary of the tests and processes performed to ensure the safety of your drinking water. For more information or questions about this report, please contact Mike Stevens at 817-1563. You can also view this on online at www.cityofcamas.us

What's Ahead

The City of Camas has received approval from the Department of Health to begin the design of a new slow sand filtration facility. Our engineering firm has completed 60% of the design drawings for this new facility. We are planning on construction beginning at the end of the summer.

The current water line project in the Fern Prairie area will be completed by the beginning of June.

Water Conservation

The average daily consumption of water for Camas in 2013 was 3.71 millions of gallons per day (mgd). During our peak day on July 27, 2013, we consumed 7.19 mgd. Most of this increase in the summer months is due to irrigation demand. We are once again asking for your help to implement a voluntary odd/even lawn watering program for residential customers. Water on odd days if your house number ends in an odd number, and even days if it ends in an even number.

To view more water saving irrigation tips go to the following website:  www.ecy.wa.gov/programs/wr/ws/wtrcnsv.html
Important Health Information

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline 800-426-4791.

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, radio-active material. It can also pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water before we treat it include:
- Microbial contaminants, such as viruses and bacteria, which 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, and mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.
- Radioactive contaminants, which are naturally occurring.
- 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, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA’s regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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. 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 at 1-800-426-4791.

EPA Statement for Lead and Copper

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. The City of Camas 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 two minutes before using water for drinking or cooking. Copper is a mineral and natural component in solids. In the correct amounts, it is an essential nutrient for humans and plants. In Washington State, most copper in drinking water comes from corrosion of household plumbing. Plumbing sources can include copper pipe and brass fixtures. Copper from plumbing corrosion can accumulate overnight. Although copper is an essential mineral in the diet, too much copper can cause health problems. Copper is widely distributed with the tissues of the body, but accumulates primarily in the liver and kidneys. A single dose of 15 mg of copper can cause nausea, vomiting, diarrhea, and intestinal cramps. 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/safewater/lead.

To Reduce Exposure
1. When your water has been sitting for several hours, flush the pipe by running the cold water tap until the water is noticeably colder before using the water for drinking or cooking.
2. Use only cold water for drinking, cooking, and making baby formula. Hot water may contain higher levels of copper.
3. Frequently clean the filter screens and aerators in faucets to remove captured particles.
4. If building or remodeling, only use “lead free” or low lead piping and materials. Avoid using copper piping or brass fixtures for locations where water will be consumed or used in food preparation (such as kitchen or bathroom sinks).

<table>
<thead>
<tr>
<th>Contaminants</th>
<th>Maximum Contaminant Level Goal mg/L</th>
<th>Action Level (AL) mg/L</th>
<th>Your Water 90th Percentile mg/L</th>
<th>Sample Year</th>
<th># of Samples Exceeding AL</th>
<th>Violation</th>
<th>Typical Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (ppb) at Consumers Tap</td>
<td>0</td>
<td>0.015</td>
<td>0.0033</td>
<td>2012</td>
<td>0 of 30</td>
<td>NO</td>
<td>Corrosion of household plumbing systems; erosion of natural deposits</td>
</tr>
<tr>
<td>Copper</td>
<td>0</td>
<td>1.30</td>
<td>0.5600</td>
<td>2012</td>
<td>0 of 30</td>
<td>NO</td>
<td></td>
</tr>
</tbody>
</table>

Reporting Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to help EPA determine their occurrence in drinking water and potential need for future regulation. For general information on UCMR 3, go to: http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr3/, or contact the Safe Drinking Water Hotline at (800) 426-4791, or at: http://water.epa.gov/drink/contact.cfm.
2013 Water Quality Test Results

The City of Camas has its water analyzed for more than 200 different contaminants, some are regulated and some not regulated. Only the contaminants that have test results are required by law to be reported to the public. The contaminants listed on page three are REGULATED and were in our water during 2013. All samples taken are from treated water that is delivered to the distribution system. All are below levels allowed by Federal and State agencies. We have provided definitions below to help you understand the terms and abbreviations that are used in the Test Results.

### Important Terms and Abbreviations

- **J**: The result is an estimate as it is greater than the method detection limit, but less than the practical reporting limit.
- **Standard Color Units:**
  - **Maximum Contaminant Level (MCL):** The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
  - **Maximum Contaminant Level Goal (MCLG):** The “Goal” (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **Milligrams Per Liter (MG/L):** A unit used in reporting the concentration of matter in water as determined by water analyses.
- **Nephelometric Turbidity Unit (NTU):** Nephelometric Turbidity Unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Picocuries Per Liter (pCi/L):** Picocuries per liter is a measure of the radioactivity in water.
- **N/A (Not applicable):** Means EPA has not established MCLGs for these substances.
- **Ug/L:** Units of measurement in micrograms/liter. A unit of concentration for dissolved substances based on their weights.
- **µs/cm:** Specific Conductance of a solution is the ability of the solution to carry an electric current.

<table>
<thead>
<tr>
<th>Regulated Contaminants Unit Measurement</th>
<th>Violation</th>
<th>Range of Level Detected</th>
<th>Ideal Goal (MCLG)</th>
<th>MAX Allowed (MCL)</th>
<th>Description &amp; Origin of Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Related (Primary) Standards: Inorganic</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fluoride (MG/L)</td>
<td>No</td>
<td>0.58-1.09</td>
<td>1</td>
<td>4</td>
<td>Sodium fluoride added to Camas water to maintain good dental hygiene.</td>
</tr>
<tr>
<td>Nitrates (MG/L) (As Nitrogen)</td>
<td>No</td>
<td>0.43-1.11</td>
<td>10</td>
<td>10</td>
<td>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural products.</td>
</tr>
<tr>
<td>Total Hardness (ppm)</td>
<td>No</td>
<td>34</td>
<td>N/A</td>
<td>N/A</td>
<td>Hardness units are in ppm as CaCO³ (calcium carbonate equivalent units).</td>
</tr>
<tr>
<td>Turbidity (NTU)</td>
<td>No</td>
<td>0.32</td>
<td>1</td>
<td>1</td>
<td>Turbidity is a measure of the cloudiness of water.</td>
</tr>
<tr>
<td><strong>Disinfection By-Products and Residuals within the Distribution System</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haloacetic Acids (Ug/L) *</td>
<td>No</td>
<td>1.10-3.70</td>
<td>48</td>
<td>60</td>
<td>By-product of drinking water disinfection.</td>
</tr>
<tr>
<td>Total Trihalomethanes (Ug/L)</td>
<td>No</td>
<td>1.50-9.70</td>
<td>60</td>
<td>80</td>
<td>Chlorination by-product caused by the reaction of chlorine with organic matter.</td>
</tr>
<tr>
<td><strong>Unregulated Contaminants Monitoring Rule (UCMR 3)</strong></td>
<td>Violation</td>
<td>Range of Level Detected</td>
<td>Average</td>
<td>Use or Environmental Source (further documented in UCMR 3 Contaminants-Information Compendium. EPA 815-B-11-001. January2012)</td>
<td></td>
</tr>
<tr>
<td>Chlorate (UG/L)</td>
<td>No</td>
<td>24.2-164</td>
<td>70.30</td>
<td>Agricultural defoliant or desiccant; disinfection by-product; and used in production of chlorine dioxide.</td>
<td></td>
</tr>
<tr>
<td>Hexavalent Chromium (UG/L)</td>
<td>No</td>
<td>0.50-1.30</td>
<td>0.50</td>
<td>Naturally-occurring element; used in making steel and other alloys; chromium-3 or -6 forms are used for chrome plating, dyes and pigments, leather tanning, and wood preservation.</td>
<td></td>
</tr>
<tr>
<td><strong>Metals: EPA Method 200.8; SM 3125; ASTM D5763-10 (SM-Standard Methods; ASTM-ASTM International)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chromium (UG/L)</td>
<td>No</td>
<td>0.48-1.30</td>
<td>0.91</td>
<td>See chromium-6 for use or source information; though the amount measured when analyzing for “total chromium” is the sum of chromium in all of its valence states, the MCL for EPA’s current total chromium regulation was determined based upon the health effects of chromium-6.</td>
<td></td>
</tr>
<tr>
<td>Strontium (UG/L)</td>
<td>No</td>
<td>31.7-166</td>
<td>57.40</td>
<td>Naturally-occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisionstoblock x-ray emissions.</td>
<td></td>
</tr>
<tr>
<td>Vanadium (UG/L)</td>
<td>No</td>
<td>1.6-16.30</td>
<td>4.90</td>
<td>Naturally-occurring elemental metal; used as vanadium pentoxide, which is a chemical intermediate and a catalyst.</td>
<td></td>
</tr>
</tbody>
</table>

*The sum of the concentration in micrograms per liter of the trihalomethane compounds (trichloromethane (chloroform), dibromochlormethane, bromodichloromethane and tribromomethane (bromoform)), rounded in two significant figures.*
Our Water System
The City of Camas has multiple water sources that include surface and ground water. The surface water sources, Boulder and Jones Creeks, are located on the south side of Larch Mountain, northeast of Camas. This surface water is disinfected, and then filtered at the Water Filtration Plant, which will be located at NE Lessard Road and NE Winters Road. The ground water sources include eight wells near the Washougal river, and one well in Grass Valley. All water sources are treated with chlorine for disinfection, fluoride for good dental health, and sodium hydroxide to reduce the corrosion of copper piping to meet State and EPA standards. Water pressure and fire flows are maintained throughout the service area with six distribution reservoirs, eight pumping stations, and over 137.5 miles of pipeline.

Water Quality Monitoring
The City of Camas routinely monitors for constituents in your drinking water according to Federal and State laws. Field and laboratory analyses include tests for bacteria, as well as chemical and physical indicators. Reports are submitted monthly to the Department of Health to report that your water meets all drinking water standards. Should there ever be a public health concern, you would be notified immediately.

Five Simple Water Conservation Tips
1. Fix leaks inside and outside, including old leaky faucets, toilets, hoses and sprinkler systems.
2. Choose water saving fixtures and appliances, and you will use 30% less water.
3. Sweep porches, driveways, and sidewalks rather than hosing, to not only conserve water, but to avoid runoff.
4. Water late at night or early in the morning (10:00 pm to 6:00 am).
5. Take a short shower instead of a bath.

An inch of water per week is enough to keep lawns green.

Check out this helpful website at www.epa.gov/watersense/fixaleak

City of Camas Numbers
Residential population served: 20,320
Seven reservoirs
7,750 water meters
More than 500 hydrants
Ten pump stations
Ten wells
One surface water plant

Water Leaks
The majority of leaks in residential plumbing systems are found at the toilet tank (fill and flapper valves). Locate your master water supply valve and label it. The master supply valve can be turned off easily in case of a major leak or broken pipe.

- Lawn irrigation valves and lines
- Hose in yard turned on or leaking
- Ornamental fountains, fish ponds
- Relief valve or fittings on water heater
- Leaking pipes or fittings in the house
- Line between the meter and the house
- Dripping faucets in bathrooms or sinks
- Outside faucet open or dripping

The City is actively working to reduce system leaks. If you suspect a leak in your neighborhood please call 360-817-1563.