



2010 Annual Drinking Water Quality Report

Junction City Public Works

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We're very pleased to provide you with this year's Annual Water Quality Report. In 1996, Congress passed amendments to the Safe Water Drinking Act that require drinking water providers to give their customers important information about their water, including where it comes from, what is in the water, and how our water quality compares with federal standards. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

What if I have questions about my water?

This report describes our water quality, and explains what the various laboratory test results mean to our customers. If you have any questions about this report or concerning your water utility, please contact Jason Knope, Public Works Director at (541) 998-3125 (email: knope@ci.junction-city.or.us). We want customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council meetings. They are held on the second & fourth Tuesdays of each month, at 6:30 p.m. at City Hall, 680 Greenwood, Junction City.

Where does our water come from?

Junction City, like many small cities, relies on groundwater for its domestic water supply. The City operates four wells that contribute to our drinking water supply. These wells draw from a deep aquifer.

We have a source water protection plan available for public review at City Hall, 680 Greenwood. The Drinking Water Protection Plan was developed in 1997, and provides information such as potential sources of contamination that could affect our water supply.

What contaminants might be in water?

The City of Junction City routinely monitors for contaminants in your drinking water according to Federal and State laws. There were no detected constituents for the monitoring period of January 1 to December 31, 2010. The City monitors the drinking water at an annual cost of approximately \$6,300. Please feel free to use the Oregon Health Divisions web site: <http://www.oregon.gov/DHS/ph/dwp/> to view our testing as well as any other water provider in the State. Our water provider ID No. is **4100418**.

- ◆ Organic compounds, including synthetic and volatile organic chemicals, are by-products of gas stations, urban storm water run-off and septic systems.
- ◆ Inorganic compounds, such as salts and metals occur naturally or are caused by urban storm run-off, mining or farming.
- ◆ Herbicides and pesticides can come from a variety of sources such as agriculture, storm water run-off and residential uses. PCB's (polychlorinated biphenyl) are chemical compounds that can be found in environmental pollution.
- ◆ Radioactive material occurs naturally or can result from oil and gas production and mining activities.

Trained City personnel check the chlorine residual levels at several locations throughout the distribution system 365 days a year. As an element of our Corrosion Control Program, weekly testing of phosphate, pH, and iron levels is also conducted. By conducting these tests we are able to determine the need to increase or decrease the level of chlorine or phosphate as necessary to maintain water quality. In addition, samples are collected once a week and analyzed by an independent laboratory for Total Coliform and E.coli Bacteria.

How can water become contaminated?

All sources of drinking water are subject to potential contamination by substances that are naturally or man made. These substances can be microbes, inorganic and organic chemicals, and radioactive substances. All 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Water Test Results – Regulated Substances Detected

Inorganic Contaminants

| <i>Contaminant</i> | <i>Violation Y/N</i> | <i>Level Detected</i> | <i>Unit of Measure</i> | <i>MCLG</i> | <i>MCL</i> | <i>Likely Source of Contamination</i> |
|--------------------|----------------------|---|------------------------|-------------|--|--|
| Barium | N | 0.0227 (13 th & Elm) | mg/l | 0.002 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Copper | N | 100% of homes tested were less than the AL of 1.3 | mg/l | 1.3 | AL = 90% of homes tested must have lead levels less than 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Lead | N | 100% of homes tested were less than the AL of 0.015 | mg/l | 0 | AL = 90% of homes tested must have lead levels less than 0.015 | Corrosion of household plumbing systems, erosion of natural deposits |

The following substances were tested for but not detected in the city’s drinking water:

Microbiological Contaminants

Fecal coliform and E.coli

Disinfection By-Products (DPB)

Haloacetic Acids (HAA) & Total Trihalomethanes (TTHM)

Inorganic Contaminants (IOC)

| | | | | | |
|----------|-----------|----------|----------|-----------------------|----------|
| Antimony | Beryllium | Chromium | Fluoride | Nitrate (as Nitrogen) | Selenium |
| Arsenic | Cadmium | Cyanide | Mercury | Nitrite (as Nitrogen) | Thallium |
| Asbestos | | | | | |

Synthetic Organic Contaminants including Pesticides and Herbicides - Regulated (SOC)

| | | |
|----------------------|---------------------------|---------------------------------|
| 2,4-D | Di(2-ethylhexyl)adipate | Heptachlor Epoxide |
| 2,4,5-TP (Silvex) | Di(2-ethylhexyl)phthalate | Hexachlorobenzene (HCB) |
| Alachlor (Lasso) | Dibromochloropropane | Hexachlorocyclopentadiene |
| Atrazine | Dinoseb | Methoxychlor |
| Benzo(a)pyrene (PAH) | Diquat | Pentachlorophenol |
| BHC-gamma (Lindane) | Endothall | Picloram |
| Carbofuran | Ethylene Dibromide (EDB) | PolychlorinatedBiphenyls (PCBs) |
| Chlordane | Glyphosate | Simazine |
| Dalapon | Heptachlor | ToxapheneVydete (Oxamyl) |

Synthetic Organic Contaminants including Pesticides and Herbicides - Unregulated (SOC)

| | | | | | |
|---------------------|--------------------|-----------|----------|-------------|------------|
| 3-Hydroxycarbofuran | Aldicarb Sulfoxide | Butachlor | Dieldrin | Methomyl | Metribuzin |
| Aldicarb | Aldrin | Carbaryl | Dicamba | Metolachlor | Propachlor |
| Aldicarb Sulfone | | | | | |

Volatile Organic Contaminants - Regulated (VOC)

| | | |
|------------------------|--------------------------|----------------------------|
| 1,1-Dichloroethylene | Carbon Tetrachloride | Styrene |
| 1,1,1-Trichloroethane | Cis-1,2-Dichloroethylene | Tetrachloroethylene |
| 1,1,2-Trichloroethane | Dichloromethane | Toluene |
| 1,2-Dichloroethane | Ethylbenzene | Trans-1,2-Dichloroethylene |
| 1,2-Dichloropropane | Monochlorobenzene | Trichloroethylene |
| 1,2,4-Trichlorobenzene | o-Dichlorobenzene | Total Xylenes |
| Benzene | p-Dichlorobenzene | Vinyl chloride |

Volatile Organic Contaminants - Unregulated (VOC)

| | | |
|---------------------------|----------------------|---------------------------|
| 1,1-Dichloroethane | Bromobenzene | Chloromethane |
| 1,1-Dichloropropene | Bromodichloromethane | o-Chlorotoluene |
| 1,1,1,2-Tetrachloroethane | Bromoform | p-Chlorotoluene |
| 1,1,2,2-Tetrachloroethane | Bromomethane | Dibromomethane |
| 1,2,3-Trichloropropane | Chlorodibromomethane | m-Dichlorobenzene |
| 1,3-Dichloropropane | Chloroethane | cis-1,3-Dichloropropene |
| 2,2-Dichloropropane | Chloroform | trans-1,3-Dichloropropene |

What do these test results mean?

As you can see by the table, our system had no violations. We’re proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

| <i>Contaminant</i> | <i>Level Detected</i> | <i>Unit of Measure</i> | <i>Likely Source of Contamination</i> |
|--------------------|--|------------------------|--|
| Radon | 444 (8 th & Deal) 531 (13 th & Elm) 474 (3 rd & Cedar) 398 (5 th & Maple) | pCi/L | Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. (You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your state radon program or call EPA’s Radon Hotline at 1-800-SOS-RADON). |

Are there any plans to improve the water system?

Yes, the City will be replacing approximately 10,000 feet of 2" galvanized water mainlines, hydrants, and water services from May 2011 until June 2012, . The project areas will include the alley east of Ivy Street from 4th to 8th, Bryant Street between SW Laurel and Prairie Road, the alley between Greenwood & Front from 5th to 7th, and then in various areas from Juniper to Maple from 3rd to 8th (except Laurel which will proceed to 12th Avenue). For further information on these upgrades please contact Public Works at (541) 998-3125.

What about people with special health problems?

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 (1-800-426-4791).

This statement is a mandatory requirement from the EPA regardless of lead levels.

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 Junction City 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. 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/safewater/lead.

Definitions:

Action Level (AL) - the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" 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. *MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one -in-a-million chance of having the described health effect.*

Maximum Contaminant Level Goal (MCLG) - The "Goal" 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.

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per billion (ppb) or Micrograms per liter (mg/L) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Did You Know?

Cross-contamination is the leading cause of waterborne disease. Cross-Contamination occurs whenever the water contacts anything that is contaminated or objectionable. Wherever this can occur is called a "cross-connection." As the water purveyor, we are mandated by State of Oregon Drinking Water rules to eliminate or control all actual and potential cross-connections.

A cross-connection is any actual or potential connection between drinking water piping and any other substance. Examples of cross-connections include: residential irrigation, fire sprinkler systems, commercial beverage dispensers, and your garden hose. If you would like to know if your home or commercial building is free of cross-connections and drinking water safe, please call our specialist at (541) 998-3125 for a free safety survey.

If you know of any backflow assemblies at your property, please be sure to have them tested annually by a certified tester.

Thank You! The City of Junction City works around the clock to provide top quality water to every tap. The water system is monitored seven days a week, 365 days per year. Our Utility Crew employees are required to achieve Water Treatment I and Water Distribution II certifications through the Oregon Health Division. Should you experience any problems with your water or, just want to ask a question, please contact us. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.