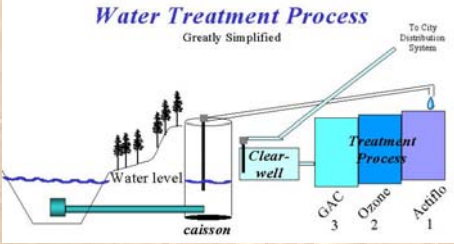


# City of Wilsonville 2010 Annual Water Quality Report

## Water Treatment Process

Greatly Simplified



In April 2002, the City of Wilsonville, Oregon began using a water treatment plant with a surface intake on the Willamette River. The Willamette River Water Treatment Plant (WRWTP) intake is in the Middle Willamette Subbasin of the Willamette Basin. The Willamette Valley watershed upstream of the Wilsonville WRWTP intake encompasses an area of approximately 8,400 square miles. Treated surface water is now the primary drinking water

source for the City, which previously had been provided solely from groundwater from the City's wells. The WRWTP meets year-round demand and has the capacity to serve growth in the future. In addition, the City has five enclosed reservoir tanks located throughout the town to store water for fires or other emergencies.

Wilsonville's previous source of water supply (eight local wells) are still available for use in emergencies. These wells tap a large groundwater formation called the Columbia River Basalt Aquifer. Aside from weekly inspections, it has not been necessary to use any of the wells for drinking water since the water treatment plant came online. All of Wilsonville's water storage tanks and wells are covered, and all have security systems in place.

## Wilsonville's Drinking Water Source Assessment Summary:

Summary of the Source Water Assessment:

Sensitive areas include a 1,000 foot buffer zone along each side of the Willamette River and along each side of the tributaries. Additional sensitive areas were identified based on potential for severe erosion, high runoff, high permeability and higher landslide/debris flow potential.

Land uses identified in the Drinking Water Protection Area include agricultural (orchards, tree farms, livestock pasture, and irrigated crops), managed forestry, parks and recreation areas, rural residential and some urban areas.



Sensitive areas within the watershed's source area protection zones are generally moderately susceptible to contamination from erosion of sediments, fuel spills, hazardous material releases, pesticide or nutrient runoff from farmland, and biological contamination from livestock waste. Relatively high erosion potential exists on steeper slopes, particularly when disturbed by human activity and/or during intense precipitation events or flooding. Relatively high runoff potential exists during periods of intense precipitation. Susceptibility to potential contamination from accidental releases, improper management practices, or nonpoint source runoff is moderate except for Potential Contaminant Sources involving storage and disbursement of fuel and/or solvents. Maps showing these areas are on file and available for viewing at Wilsonville City Hall upon request.

City of Wilsonville

29799 SW Town Center Loop E.


Wilsonville, OR 97070

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2010 Annual Drinking Water Report

## Treatment of Potential Drinking water contaminants



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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. The City of Wilsonville continuously meets or exceeds EPA and State requirements for safe drinking 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.

Contaminants that may be present in source water 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 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

### For Further Information...

If you have any questions about this report or would like additional information, please contact Delora Kerber, the City of Wilsonville's Public Works Director, at 503-682-4092. You may also learn more by attending meetings of the Wilsonville City Council. These meetings occur regularly at 7:00 p.m. on the first and third Mondays of each month. The Council meets at City Hall at 29799 SW Town Center Loop E, Wilsonville, OR 97070

### Important Contact Information

Water bill questions - (503) 682-1011

Report a water leak - (503) 682-1011

EPA Hotline (free) - 1-800-426-4791



State of Oregon Drinking Water Program: [www.ohd.hr.state.or.us/dwp](http://www.ohd.hr.state.or.us/dwp)

City of Wilsonville on the web: [www.ci.wilsonville.or.us](http://www.ci.wilsonville.or.us)

EPA Water Website: <http://www.epa.gov/safewater/>



## Potential Lead in your drinking water



The City of Wilsonville 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 2 minutes before using water for drinking or cooking. "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. 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 1-800-426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

### According to the EPA.....

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency'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, persons 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 microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

### Water, Sewer & Storm Utilities:

Water, sewer, and storm water are utilities operated and billed by the City. For move-in/move-out information or to report a leak or other issue, please contact the City's utility department at:



### Utility Billing

City Hall -2nd Floor  
29799 SW Town Center Loop E.  
Wilsonville, OR 97070  
(503)-682-1011  
[utility@ci.wilsonville.or.us](mailto:utility@ci.wilsonville.or.us)

### Emergency Contact number For Water:

Contact Public Works after-hours emergency service number for water related problems.

**1-866-252-3614**

Public Works  
30000 SW Town Center Loop E  
Wilsonville, OR 97070  
(503)-682-4092  
[pw@ci.wilsonville.or.us](mailto:pw@ci.wilsonville.or.us)  
M-F 7:30am-4:30pm

## Results of Water Quality Monitoring

Federal and State drinking water standards require monitoring and reporting of numerous specific water quality parameters. For each parameter, limits called "maximum contaminant level" are established. The U.S. Environmental Protection Agency (EPA) has determined that drinking water is safe at these levels. The EPA also specifies the laboratory methods which must be followed by certified water labs when analyzing the water.

Detected Contaminant	Date Tested	Unit	Range	MCL	MCLG	Potential Sources	Violation
<b>INORGANIC CONTAMINANTS</b>							
<b>Barium</b>	Quarterly	ppm	.0032 - .0048	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	<b>NO</b>
<b>Copper</b>	Quarterly	ppm	.011 - .017	AL = 1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	<b>NO</b>
<b>Nitrate</b>	Quarterly	ppm	.19 - .64	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	<b>NO</b>
<b>DISINFECTION BYPRODUCTS, BYPRODUCT PRECURSORS, AND DISINFECTANT RESIDUALS</b>							
<b>Total Trihalomethanes (TTHMs)</b>	Quarterly	ppb	1.2 - 30.6	80	0	Byproduct of drinking water disinfection	<b>NO</b>
<b>Haloacetic Acids (HAA)</b>	Quarterly	ppb	0.0 - 7.4	60	N/A	Byproduct of drinking water disinfection	<b>NO</b>
<b>SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES</b>							
<b>Benzo(a) pyrene (PAH)</b>	Quarterly	ppt	0.0 - 30	200	0	Leaching from linings of water storage tanks and distribution lines	<b>NO</b>
<b>MICROBIOLOGICAL CONTAMINANTS</b>							
<b>Turbidity</b>	Daily	NTU	.072 (100% limits met)	TT	N/A	Sediment/Soil runoff	<b>NO</b>
<b>RADIOACTIVE CONTAMINANTS</b>							
<b>Beta/photon emitters</b>	2/28/08*	mrem/yr	ND	50	0	Decay of natural and man-made deposits	<b>NO</b>
<b>Alpha emitters</b>	2/28/08*	pCi/l	3	15	0	Erosion of natural deposits	<b>NO</b>
<b>Combined radium</b>	2/28/08*	pCi/l	1	5	0	Erosion of natural deposits	<b>NO</b>
<b>Combined Uranium</b>	2/28/08*	ug/l	1	30	0	Erosion of natural deposits	<b>NO</b>
*Radioactive Contaminants are tested once every five years making this data the most recent monitoring done in compliance with regulations							
<b>RESULTS OF LEAD AND COPPER TESTING SUMMER 2009</b>							
<b>Lead</b>	8/23/09 - 9/9/09	ppb	7.0 (90th)*	AL = 15	0	Corrosion of household plumbing systems; erosion of natural deposits	<b>NO</b>
<b>Copper</b>	8/23/09 - 9/9/09	ppm	.07 (90th)*	AL = 1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	<b>NO</b>
*There were no results for copper or lead below the 90th percentile that exceeded regulatory action limits. 2 of 34 locations tested exceeded Lead AL of 15ppb and were notified as a result.							
The 34 homes selected for testing are based on the year they were built (1983-1987) when construction practices commonly installed copper piping and used lead based solder. As a result of these plumbing fixtures, the lead and copper metals have dissolved into those particular home plumbing systems and not the general public water supply.							

### In reading the following table, please note these definitions:

**Maximum contaminant level goal (MCLG):** 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.

**Maximum contaminant level (MCL):** 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. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two 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 Residual Disinfectant level Goal (MRDLG):** 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 contamination.

**Maximum Residual Disinfectant Level (MRDL):** 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.

**TT = Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.

**AL = action level.** The concentration of a contaminant, which, if exceeded, triggers a treatment or other requirement which a water system must follow. For lead and copper, a water supply is in compliance with the drinking water standards if 90% of the samples are less than or equal to the "action level."

**Nephelometric turbidity units (NTU) -** a measure of light-scattering particulate in the water, or how clear the water is.

**n/a =** not applicable.

**ND =** not detected.

**ppm =** parts per million or milligrams per liter.

**ppb =** parts per billion or micrograms per liter.

**ppt =** parts per trillion, or nanograms per liter.

**pCi/l =** picocuries per liter (a measure of radioactivity).