



City of Wooster, Ohio
Water System 2011 Consumer Confidence Report
Wooster Water – It's Your Water



The City of Wooster
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Wooster, Ohio 44691

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Wooster Water Sources

Wooster's water is pumped from the Killbuck Buried Valley Aquifer. Protection of Wooster's well water supply is of utmost importance. In 1998, the City began a Wellhead Protection Program, including the establishment of a committee to review the program and advise on its implementation. This program identifies the source and boundaries of the City's aquifer and the potential sources of contamination that could affect the water in the aquifer. The sand and gravel aquifer is susceptible to contamination. The City has identified potential sources within the wellhead protection area. These sources include several industrial activities, underground storage tanks, and abandoned landfills. Volatile organic compounds (VOCs) have been detected in water well S-1, confirming the sensitive nature of the aquifer. The city has worked to keep VOCs out of the remaining public water wells through pumping and ground water monitoring. The City of Wooster has placed a priority on protecting its ground water resources through public education and source controls. Education will be focused on those activities identified by the potential contamination source inventory. Source controls will focus on education, recycling methods, and pollution prevention. Several industrial activities, underground storage tanks, and abandoned landfills near the well fields were identified as high priority potential sources of pollution. You can review the report by contacting us at the water plant. We encourage your participation on the Wellhead Protection Committee.

Phone Numbers You May Need

Water Treatment Information Concerns	Call the Water Treatment Plant Personnel	7 a. m. – 3:00 p. m. Mon – Fri Operations Staff 24 / 7	330 - 263 - 5286
Billing Related Questions	Call Customer Service at City Hall	8 a. m. – 5:00 p. m. Monday through Friday	330 - 263 - 5228
Water Meter Problems, Shut-offs	Call Customer Service at City Hall	8 a. m. – 5:00 p. m. Monday through Friday	330 - 263 - 5228
Water Main Breaks	Call Pubic Properties Maintenance Division	Calls from 7 a. m. – 3:30 p. m. Monday through Friday	330 - 263 - 5275
Water Main Breaks	Call the Water Treatment Plant	Calls after 3:30 pm and on weekends and holidays	330 -263 - 5286

Additional Information

Wooster has a current, unconditional license (PWS OH8504512) to operate our water system. All operational personnel at the Wooster Water Plant are certified through the Ohio EPA Water Certification Program. The water supplied to your home meets or exceeds the established "Water Quality Standards" of the Federal Safe Drinking Water Act (SDWA). Feel free to call us for a tour of the water treatment plant. We welcome your questions and feedback about this Water Quality Report and any other questions or concerns you have about Wooster water. There were no plant violations in 2011. Consumer Confidence Reports of the past years are available by contacting the Water Treatment Plant or online at: <http://www.woosteroh.com/reports.php>. Since 1936, Wooster has continued a tradition of providing quality water to its citizens. We are working hard to continue that tradition of high quality, safe drinking water. Your help and support is always appreciated.

Water Monitoring Results

There were no contaminants detected at levels that violated Federal drinking water standards during 2011. The contaminants are shown in the table that follows on page three. Tests were performed on the drinking water during the year 2011 unless otherwise noted in the report. We have not listed a large number of substances that were tested for and not detected in the drinking water. If you would like to know more about the tests listed or other laboratory data performed regularly on Wooster's water, please call the Water Treatment Plant at 330-263-5286.

Key to Abbreviations

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers additional treatment measures by the public water system.

Center For Disease Control (CDC)

Environmental Protection Agency (EPA)

Initial Distribution System Evaluation (IDSE): Sample results for USEPA special monitoring.

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.

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.

N/A: Not Applicable

Million Gallons per Day (MGD)

Nephelometric Turbidity Units (NTU) - Turbidity is a measure of cloudiness in water and does not present any risk to your health.

Picocuries Per Liter (pCi/L) A measure of radioactivity.

The "<" symbol: means less than.

The ">" symbol: means more than.

Treatment Technique (TT): A required process intended to reduce the level of contaminant in drinking water.

Examples of Contaminant Concentrations

The following common scientific measures of substances in water may be difficult to envision. The comparisons listed below are presented to make them easier to understand.

Parts per million (ppm) or milligrams per liter (mg/l).

Examples:

One part per million is equivalent to one minute in two years;
or a single penny in ten thousand dollars.

Parts per billion (ppb) or micrograms per liter (ug/L).

Examples:

One part per billion corresponds to one minute in two thousand years;
or a single penny in ten million dollars.

Measured at the Wooster Water Treatment Plant							
SUBSTANCE	Measuring Units Used	Highest Level Allowed by USEPA (MCL)	Highest Level Detected in Wooster's Water	Range Detected in Wooster's Water Low/High	Ideal Goals set by USEPA (MCLG)	Violation Y/N	Description & Source of Substances
Nitrate 2011	ppm	10.0	<0.1	N/A	10.0	N	Erosion of natural deposits; runoff from fertilizer use; leaching from septic tanks.
Fluoride 2010	ppm	4.0	0.125	N/A	4.0	N	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Arsenic 2010	ppb	10	<3.0	N/A	0	N	Erosion of natural deposits; runoff from orchards; discharge from glass and electronics factories.
Barium 2010	ppm	2.0	0.028	N/A	2.0	N	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Selenium 2010	ppb	50.0	<1	N/A	50.0	N	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

Measured in Wooster's Distribution System							
SUBSTANCE 2011	Measuring Units Used	Highest Level Allowed by USEPA (MCL)	Highest Level Detected in Wooster's Water	Range Detected in Wooster's Water Low/High	Ideal Goals set by USEPA (MCLG)	Violation Y/N	Description & Source of Substances
Total Coliform Bacteria	Positive Samples/Mo	0	1	0 to 1	0	N	Naturally present in the environment.
Bromodichloromethane	ppb	Not Regulated	12	N/A	N/A	N	By-product of drinking water chlorination.
Bromoform	ppb	Not Regulated	8.8	N/A	N/A	N	By-product of drinking water chlorination.
Chloroform	ppb	Not Regulated	5.1	N/A	N/A	N	By-product of drinking water chlorination.
Dibromochloromethane	ppb	Not Regulated	16	N/A	N/A	N	By-product of drinking water chlorination.
Total Trihalomethanes	ppb	80.0	41.9	N/A	N/A	N	By-product of drinking water chlorination.
Halacetic Acids	ppb	60.0	6.9	N/A	N/A	N	By-product of drinking water disinfection.

Measured at Customer Faucets							
SUBSTANCE 2010	Measuring Units Used	Highest Level Allowed by USEPA (MCL)	Highest Level Detected in Wooster's Water	Range Detected in Wooster's Water Low/High	Ideal Goals set by USEPA (MCLG)	Violation Y/N	Description & Source of Substances
Lead	ppb	AL=15.0	<5* <5	<5 / 5	0	N	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	ppm	AL=1.3	0.022* 0.031	<0.05 to 0.031	1.3	N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Special Testing for IDSE in Wooster's Distribution System							
SUBSTANCE 2009	Measuring Units Used	Highest Level Allowed by USEPA (MCL)	Highest Level Detected in Wooster's Water	Range Detected in Wooster's Water Low/High	Ideal Goals set by USEPA (MCLG)	Violation Y/N	Description & Source of Substances
Total Trihalomethanes	ppb	80.0	58.0	12.5 / 58.0	N/A	N	By-product of drinking water chlorination.
Haloacetic Acids	ppb	60.0	11.5	<6.0 / 11.5	N/A	N	By-product of drinking water disinfection.

* 90 th percentile



Water usage and Savings Chart For Comparison					
Source City of Columbus, Ohio, 2009 CCR					
	Normal Usage		Conservation Usage		
	Gals used	Method	Gals used	Method	Savings
Shower (10 mins)	50	Shower head running continuously	25 25 12.5	Shorter Shower (5 mins) OR Low flow shower head (10 min) OR Low flow shower head (5 min)	50% 50% 75%
Tub Bath	36	Standard tub, full	18	Standard tub, half full	50%
Toilet flushing	5 - 7	Depends on tank size	4 - 6 1.6	Use a displacement bag, or milk jug in the tank (or) Replace with low flow toilet	20% 73%
Washing hands	5	With tap running continuously	1	Fill a standard basin	80%
Brushing teeth	10	With tap running continuously	1	Wet brush with brief rinses	90%
Shaving	20	With tap running continuously	1	Fill standard basin	95%
Washing dishes	30	With tap running continuously	10	Wash and rinse with a half filled standard sink.	66%
Dishwasher	16	Full cycle	7	Short cycle	56%
Washing machine	60	Full cycle: Highest water level	27	Short cycle	55%
Less than 1% of the world's fresh water supplies are available for human consumption.					

POTENTIAL SOURCES OF DRINKING WATER CONTAMINATION

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 earth, it dissolves naturally occurring minerals, and in some cases, radioactive materials. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include the following:

- (A) Microbial contaminants,** bacteria such as E coli, Cryptosporidium, Giardia, and viruses may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants,** such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial or domestic waste discharges, oil and gas production, mining or farming.
- (C) Pesticides and herbicides** may come from a variety of sources such as agriculture, urban storm water runoff, and residential use.
- (D) Organic chemical contaminants,** including synthetic and volatile organic chemicals are by-products of industrial processes and petroleum production and can also come from gas stations, urban runoff, and septic systems.
- (E) Radioactive contaminants** can be naturally occurring or the result of oil and gas production and mining activities.

While drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of the mineral arsenic, which is known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 Wooster is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been setting 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 at <http://www.epa.gov/safewater/lead>.

SPECIAL PRECAUTIONS FOR SOME PEOPLE

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/CEC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).