



Department of Environmental Health & Safety  
(937) 775-2215  
Fax (937) 775-3761

---

## **Wright State University Public Water System 2013 Drinking Water Consumer Confidence Report**

### **Spanish (Español)**

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

### **French (Français)**

Ce rapport contient des informations importantes sur votre eau potable. Traduisez-le ou parlez en avec quelqu'un qui le comprend bien.

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

### **Where does my water come from?**

WSU operates its own public drinking water system that draws water from the Mad River Buried Valley Aquifer. The Water Supply Plant is located at the west end of Lot #20 adjacent to Kauffman Avenue. Ground water is delivered to the Water Supply Plant from two separate wells utilizing two well pumps at the northwest end of Lot #20. The Water Supply Plant has supplied drinking water to the university since 1977. WSU blends its water with water from the City of Fairborn. This report does not include information for the water supplied from the City of Fairborn, in 2013. A copy of Fairborn's Consumer Confidence Report can be obtained by contacting the Fairborn Water Department at (937) 754-3097 or at the city's website ([fairborn.oh.us/water](http://fairborn.oh.us/water)).

### **Source water assessment and its availability**

The 1996 Amendments to the Safe Drinking Water Act require the Ohio Environmental Protection Agency (OEPA) to conduct source water assessments for all Public Water Systems (PWS's). The assessment information will assist PWS's in understanding the potential threats to their water supply and help them protect their water supply. According to the OEPA Source Water Assessment Report for Wright State University, the aquifer that supplies drinking water to WSU has a high susceptibility to contamination. This is due to the sensitive nature of the aquifer and the existing potential

contaminant sources identified. This does not mean that this well field will become contaminated; only that conditions exist for the ground water to be impacted by potential contaminant sources.

### **What are the sources of contaminants to drinking water?**

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 (EPA) Safe Drinking Water Hotline (800-426-4791).

### **Do I need to take special precautions?**

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

### **Description of water treatment process**

Your water is treated by filtration and disinfection. Filtration removes particles suspended in the source water. Particles typically include clays and silts, natural organic matter, iron and manganese, and microorganisms. Your water is also treated by disinfection. Disinfection involves the addition of chlorine or other disinfectants to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

### **Water Conservation Tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.

- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit [www.epa.gov/watersense](http://www.epa.gov/watersense) for more information. Source Water Protection Tips Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:
- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

### **Chloride Information**

In April 2013, during maintenance activities on the water system, high chloride levels in the drinking water were discovered. The EPA has established a secondary maximum

contaminant level (SMCL) for chlorides in drinking water. As opposed to Maximum Contaminant Level's, SMCL's are established only as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color and odor. The SMCL for chlorides in drinking water is set at 250 mg/L. Levels exceeding 250 mg/L, but not more than 390 mg/L were discovered. To reduce the level of chlorides in the drinking water below the SMCL WSU began, and is currently, blending university drinking water with water from the City of Fairborn. For more information on SMCL's refer to this guidance document authored by the USEPA - <http://water.epa.gov/drink/contaminants/secondarystandards.cfm> WSU is currently working with the EPA to initiate an investigation of the WSU well field and develop a plan to address the chloride contamination.

### **Additional Information for Lead**

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. Wright State University 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 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>.

### **Is your drinking water monitored?**

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better

understand these terms, we have provided the definitions below the table.

## WATER QUALITY MONITORING INFORMATION

Contaminants (units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contamination
<b>INORGANIC CONTAMINANTS</b>							
Barium (ppm)	2	2	0.307	N/A	NO	2011	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (ppm)	10	10	BDL	BDL	NO	2013	Discharge from fertilizer or septic tanks
Fluoride (ppm)	4	4	0.700	N/A	NO	2011	Erosion of natural deposits/ possible discharge from fertilizer or aluminum factories
Lead (ppb)	0	15	14	N/A	NO	2013	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	1.3	0.211	N/A	NO	2013	Corrosion of household plumbing systems; Erosion of natural deposits

<b>DISINFECTANTS AND DISINFECTION BY-PRODUCTS</b>							
TTHMs [Total Trihalomethanes] (ppb)	N/A	80	61.28	5.19-61.28	NO	2013	By-product of drinking water chlorination
Haloacetic acids [HAA] (ppb)	N/A	60	38.49	0-38.49	NO	2013	By-product of drinking water chlorination

<b>SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES AND HERBICIDES</b>							
Lasso, Atrazine, Simazine(ppb)	3.0 ug/l 3.0 ug/l 4.0 ug/l	3.0 3.0 4.0	<0.2 <0.3 <0.3	BDL-0.2 BDL-0.3 BDL-0.3	NO	2012	Pesticides/herbicide runoff from crops

Contaminants (units)	SMCL	Level Found	Violation	Explanation and Comment
<b>ADDITIONAL CONTAMINANTS</b>				
Chloride (ppm)	250 ppm	390 ppm	YES	Runoff from winter deicing or roadways and parking lots. Salt storage practices.

The EPA also requires certain operational data to be monitored by water plant personnel. This includes water volume production rates, hardness levels, iron and manganese levels, and levels of chlorine in the water for disinfection. Information on operational data can be obtained by contacting the Physical Plant Department at (937) 775-2307 or (937) 775-3658.

## **Definitions:**

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

BDL (Below Detection Level) - concentration of a contaminant is lower than the level of detection by current chemical tests.

MCLG (Maximum Contaminant Level Goal) – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL (Maximum Contaminant Level) – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

N/A - Abbreviation for “not applicable.”

ppb (parts per billion or micrograms per liter) – Unit of measure for concentrations of a contaminant. A part per billion corresponds to one second in 31.7 years.

ppm (parts per million or milligrams per liter) – Unit of measure for concentrations of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

SMCL (Secondary Maximum Contaminant Level) – the advisable maximum level of a contaminant in water, which is delivered to the free-flowing outlet of the ultimate user of a public water system. Contaminants added to the water under circumstances controlled by the user, except those resulting from corrosion of piping and plumbing caused by water quality, are excluded from this definition.

## **How can the public get more information or participate in decision-making?**

Information concerning WSU's public water supply operation can be obtained by calling Bryan Vest, HVAC Supervisor, WSU Physical Plant at (937) 775-3658. Information concerning sampling and analysis of contaminants can be obtained by calling William Palmer, WSU Department of Environmental Health and Safety at (937) 775-3788.

April 7, 2014