



Where Government Works

2011 Franklin County Water Quality Report

District # 4 | pwsid#2501003

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Franklin County Department of Sanitary Engineering

Franklin County Board of Commissioners

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Franklin County's Commitment to Service

The Franklin County Department of Sanitary Engineering is committed to making necessary investments to ensure safe, clean drinking water while providing the most efficient, cost-effective, and sustainable service to Franklin County's residents and businesses.

The continuing modernization of Franklin County's water and sewer service is a top priority, as these investments both improve the quality of life for our residents and position Franklin County to compete for jobs and economic development.

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The Franklin County Department of Sanitary Engineering is responsible for providing a safe and dependable supply of drinking water to your community. This report covers January 1 through December 31st, 2011. The County Sanitary Engineer's District #4 drinking water supply surpasses the strict regulations of both the State of Ohio and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this annually.

In 2011, our water department distributed 483 million gallons of water to customers. Our water source is purchased pretreated water from the City of Columbus, the Dublin Road Water Plant and distributed to Sanitary District #4. This water services customers who live in downtown Columbus, western Franklin County, and southwestern Franklin County. The Dublin Road Water Plant relies on surface water from the Griggs and O'Shaughnessy Reservoirs on the Scioto River. Columbus treats your water using disinfection and filtration to remove or reduce harmful contaminants that may come from the source water.

If you have questions about this report or your water utility service, please contact us by calling 614-525-3940 or by writing to 280 East Broad Street, 2nd Floor, Room 201, Columbus, OH 43215-4562.

**Franklin County Sanitary Engineers - Sanitary District #4
2011 Monitoring Results for Contaminates in Drinking Water**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer, organ transplants, HIV/AIDS, 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).

Columbus' water is regularly tested for organisms that could be harmful to people- including cryptosporidium (Cypto).
While it is sometimes found in the Ohio Rivers and streams, Crypto has NEVER been found in our drinking water

Contaminant	Unit	MCLG Health Goal	MCL EPA Limits	Level Detected	Range Detected	Violation (Yes-No)	Year Sampled	Potential Source of Contamination
The following results are from tests completed by Dublin Road Water Plant								
Microbiological Contaminants								
Turbidity	NTU	NA	TT	0.17 Highest	0.03-0.17	NO	2011	Soil Runoff
Total Organic Carbon	TT	NA	TT	100% met limits				
				2.38 LRAA	1.68-3.71	NO	2011	Naturally present in the environment
Inorganic Contaminants								
Fluoride	ppm	4	4	1.17	0.59-1.17	NO	2011	Erosion of natural deposits. Water additive to promote strong teeth.
Nitrate	ppm	10	10	5.6	0.6-5.6	NO	2011	Runoff from fertilizer use. Leaching from septic tanks. Erosion of natural deposits.
Disinfection								
Total Chlorine	ppm	4 (MRDLG)	4 (MRDL)	1.54 avg.	0.43-2.9	NO	2011	Water additive used to control microbes.
<i>Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.</i>								
Synthetic Organic Contaminants								
Atrazine	ppb	3	3	0.43	<0.10-1.66	NO	2011	Runoff from herbicide used on row crops.
Simazine	ppb	4	4	<0.10	<0.10-0.17	NO	2011	Herbicide Runoff
Alachlor	ppb	0	2	ND	ND	NO	2011	Agricultural Herbicide Runoff
Disinfection By Products (Tested by Sanitary District #4)								
Haloacetic Acids (HAA5)	ppb	NA	60	38	20.6-70.5	NO	2011	Byproduct of drinking water chlorination
Total Trihalomethanes (TTHMs)	ppb	0	80	58	19.3-87.9	NO	2011	Byproduct of drinking water chlorination

How to Read this Report

The goal of the Franklin County Department of Sanitary Engineering is to ensure that any contaminants in your drinking water are restricted below a level at which there is no known health risk.

This report shows the types and amounts of key elements in your water supply, their likely sources and the maximum contaminant level (MCL) that the EPA considers safe. The water delivered to your home meets ALL of the requirements of the Safe Drinking Water Act (SDWA). If for any reason the standards are not met, the public will be notified.

Un-Regulated Substances:

Unregulated contaminant monitoring helps the EPA determine where certain contaminants may occur and whether regulation is needed.

Substance	Unit	Level Detected	Range	Year
Bromodichloromethane	ppb	5.4	NA	2011
Chloroform	ppb	17	NA	2011
Dibromochloromethane	ppb	0.8	NA	2011
Hardness	ppm	102 avg.	120-128	2011
Metolachlor	ppb	ND	ND	2011
pH	su	7.8 avg.	7.7-7.8	2011
Sodium	ppm	50 avg.	20-161	2011
Metribuzin	ppb	ND	ND	2011
Bromoform	ppb	<0.5	NA	2011

Lead & Copper Monitoring Performed at Home Tap

Contaminant	Unit	MCLG Health Goal	MCL EPA Limits	Level Detected	Violation (Yes-No)	Year Sampled	Potential Source of Contamination
Inorganic Contaminants							
Copper	ppm	1.3	1.3 = AL	0.063 (90th percentile) 30 Sites Sampled All sites below action level	NO	2011	Corrosion of household plumbing. Erosion of natural deposits.
Lead	ppb	0	15 = AL	0.0 (90th percentile) 30 Sites Sampled All sites below action level	NO	2011	Corrosion of household plumbing. Erosion of natural deposits.



The Franklin County Department of Sanitary Engineering is committed to providing vital resources to Franklin County residents and businesses, and to protecting the local environment in a fiscally responsible manner.

Sanitary Engineering is responsible for providing water and sewer service to approximately 40,000 residents of Franklin County. We operate one water treatment plant and five sewage treatment plants, which are located in various areas throughout the county. In addition, the department maintains nine sewer systems, whose discharge eventually is processed under contract by the City of Columbus.

The U.S. Environmental Protection Agency (EPA) wants you to know:

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provide by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

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 what 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 (1-800-426-4791).

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, 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 storm water 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 storm water runoff, and residential uses. Organic chemical contaminants, including stations, urban storm water runoff, and septic systems. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities

Understanding the Dangers of Lead in Water

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 Franklin County Department of Sanitary Engineering 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 on the Safe Drinking Water Hotline at 1-800-426-4791 or online at www.epa.gov/safewater.

Understanding Important Abbreviations, Terms, and Definitions	
Action Level (AL)	The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water, below which there is no known or expected health risk. MCLGs allow for a margin of safety.
Maximum Contaminant Level (MCL)	The highest level of contaminant allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.
Secondary MCL (SMCL)	A nonenforceable numerical limit set by the USEPA for a contaminant on the basis of aesthetic effects to prevent an undesirable taste, odor, or appearance.
N/A	Not Applicable
ND	No Detect
NTU	Nephelometric Turbidity Unit (measure of particles held in suspension in water)
Parts per Billion (ppb) or Micrograms per Liter (ug/L)	Units of measurement for concentration of a contaminant. A part per billion corresponds to one second in roughly 31.7 years.
Parts per Million (ppm) or Milligrams per Liter (mg/L)	Units of measurement for concentration of a contaminant. A part per million corresponds to one second in roughly 11.5 days.
Grains per Gallon (gpg)	A non-metric unit of measurement for hardness used in North America.
MRDL	Maximum Residual Disinfectant Level: highest level of a disinfectant allowed in drinking water. Addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal: level of 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 contaminants.
Treatment Technique (TT)	Required process intended to reduce the level of contaminant in drinking water. For Total Organic Carbon (TOC) the level must be above 1. For turbidity the level must be under 0.3 NTU 95% of the time, and always < 1 NTU.
Turbidity	Measurement of cloudiness of water. Turbidity is often a good indication of water quality and the effectiveness of treatment process.



Water Conservation: When you start saving water, you start saving money

Being water and energy efficient provides a wide range of benefits, for consumers, businesses and the community as a whole. Using less water means moving and treating less water, which helps reduce the strain on our drinking water supplies and wastewater infrastructure.

Delivering water and wastewater services is also an energy-intensive effort, as the water is treated, pumped to homes and businesses, then pumped to wastewater facilities to be treated again. Pursuing energy efficiency in our water systems can significantly reduce operating costs, while mitigating the effects of climate change.

Whether through simple daily tasks or the installation of water-efficient products, there are many ways to decrease water and energy use in our homes. You can cut your water usage by changing a few habits. Consider following some of these steps throughout your house:

Make sure your home is leak-free

Check your water meter over a period of time when you are certain that no water is being used. If the meter reading changes, you have a leak. And repair leaks as soon as they are discovered. A seemingly small leak can waste 70-100 gallons of water per day.

Check your toilet tank

Lower the rise of toilet tank water by adjusting the tank float. Another option is to put a small plastic jug filled with water and some weights into the tank to displace water. You could save up to half a gallon with every flush. If you are remodeling your bathroom, replace your old inefficient 3-5 gallon-per-flush toilet with a new low volume 1.6 gallon-per-flush model.

Leaks may be difficult to see, so check your toilet tank by adding a few drops of food coloring into the tank. Wait 20 minutes and then look in the bowl for traces of the dye. If you see the dye in the bowl, you have a leak. If the color in the tank is lighter or you don't see the dye any longer, this is another indication that you have a leak. Call a plumber if you can't fix the problem yourself.

Install low-flow devices

Installing a low-flow showerhead or fitting a flow restrictor into your current showerhead can reduce water use by 50%. A low flow sink faucet aerator can save up to 280 gallons per year. These devices also save on hot water costs and increase water pressure.

Cut down on marathon showers

A shower almost always uses less water than a bath. Even a five-minute shower can use about 35 gallons of water, so keep it short! Shorter showers save hot water costs and air conditioning bills.

Turn off the water while brushing teeth or shaving

Only turning on the water to rinse can save up to 10 gallons of water per day.

Defrost food in the refrigerator

Don't use running water to thaw food; it wastes water. Defrosting in the refrigerator also helps prevent bacterial contamination.

Don't over-wash for clothes

By eliminating the pre-soak and second rinse cycles when you use your washing machine, you can save as much as 19 gallons of water per load.

Put the hose away

Washing your car with a bucket and sponge instead of a hose saves a lot of water. A hose can waste 6 gallons per minute if you leave it running, but using a bucket and sponge only uses a few gallons. Where possible, consider putting your car in the grass to allow the water to soak back into the ground instead of the sewer.

Beat the heat

The best time to water your yard is in the early morning or late evening when it's cool outside. Watering when it's hot and sunny is wasteful because most of the water evaporates before the plants have time to drink it. Also, when watering the yard, make sure not to water the plants too much. Remember that a little sprinkle goes a long way.

Remember, water can be recycled

Don't pour water down the drain when there may be another use for it. For example, when meals are prepared and vegetables or other fresh produce are washed, collect that water and use it to water the plants.

