

# Annual Water Quality Report

## Dahlonega Water System

465 Riley Road  
Dahlonega, GA 30533  
(706) 864-6133

This report includes data collected between January 1, 2012 and December 31, 2012

The City of Dahlonega Water Works (WSID#: GA1870000) is pleased to report that your community's drinking water met all safety and quality standards set by the State of Georgia and EPA during the previous year. This 2012 Water Quality Report provides our customers with detailed accounts of all the monitoring and testing results gathered from water quality testing during the previous year. Our employees are committed to providing you with safe, dependable tap water on a year round basis and are proud to provide this information. For more information about your water or this report, please call John Jarrard at (706) 864-3591.

Your water comes from the Yahoola Creek Reservoir which is feed by Yahoola Creek and Ward Creek. The City of Dahlonega Water Works uses membrane technology to remove solids (greater than 0.1 microns), organics and certain metals that are dissolved in the surface water. After filtration, the water goes thru fluoridation and disinfection by using sodium hypochlorite. Once the water is in the City's Distribution System additional testing is performed to ensure the water remains safe and of the highest quality.

### Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2012 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1, 2012-December 31, 2012.

**Terms & Abbreviations used below:**

- 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.
- Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment of other requirements which a water system must follow.
- n/a:** not applicable
- nd:** not detectable at testing limit
- ppm:** parts per million or milligrams per liter and corresponds to 1 penny in \$10,000.
- ppb:** parts per billion or micrograms per liter and corresponds to 1 penny in \$10,000,000.
- Nephelometric Turbidity Units (NTU):** a measure of very small particulate matter in drinking water.
- Treatment technique (TT):** a required treatment technique or process intended to reduce the level of a contaminant in drinking water.

Microbiological Contaminants Table							
Parameter (units)	MCL	MCLG	Dahlonega Water System Results	Range of Detection	Sample Date	Violation	Typical Source of Contaminant
*Turbidity (NTU)	TT=0.3NTU	n/a	0.06 NTU (MAXIMUM)	n/a	2012	NO	soil runoff
	TT= % of sample <0.3 NTU		100%	n/a		NO	

\* Turbidity is a measure of the cloudiness of water. Monitoring the turbidity is a good indicator of the effectiveness of our filtration system.

Inorganic Contaminants Table							
Parameter (units)	MCL	MCLG	Dahlonega Water System Results	Range of Detection	Sample Date	Violation	Typical Source of Contamination
Fluoride (ppm)	4	4	1.00	0.78 – 1.14	2012	NO	water additive that promotes strong teeth
Chlorine (ppm)	4.0 MRDL	4.0 MRDLG	1.16	0.81 – 1.53	2012	NO	water additive
Copper (ppm)	AL = 1.3	1.3	0.14	nd - 0.17	2010	NO	corrosion of household plumbing system
Lead (ppb)	AL = 15	0	2.5	nd – 31	2010	NO	corrosion of household plumbing system
Nitrate/Nitrite (ppm)	10	10	0.32	0.24 – 0.44	2012	NO	runoff from fertilizer use; erosion of natural deposits

Lead and copper: 90<sup>th</sup> percentile value of samples collected from the most recent round of sampling.

Organic Contaminants Table							
Parameter (units)	MCL	MCLG	Dahlonega Water System Results	Range of Detection	Sample Date	Violation	Typical Source of Contamination
Total Organic Carbon (removal ratio)	TT	n/a	1.62	1.0 – 2.86	2012	NO	naturally present
Total Trihalomethanes (ppb)	>80	n/a	39.9	34.0 – 45.8	2012	NO	by-product of drinking water chlorination
Total Haloacetic Acids (ppb)	>60	n/a	40.0	33.2 – 46.2	2012	NO	by-product of drinking water chlorination

## Water Restrictions

Please be aware that the City of Dahlonega is under a state wide outdoor watering restriction. Watering restrictions change with the environment, therefore we encourage you to call our outdoor watering hot-line at 706-867-6766 for the latest restrictions.

## Source Water Assessment

The City of Dahlonega Water Works and the Georgia Mountains Regional Development Center (GMRDC) have completed an assessment of potential for pollution of surface drinking water supply sources. The results of this assessment gave a rating of **high** and can be found on the Internet at <http://www.gmrdc.org>, or you can request a copy by mail from the Georgia Mountains Regional Development Center, P.O. Box 1720, Gainesville, GA 30503, Phone: (770) 538-2626, or Fax: (770) 538-2625.

A source water assessment is a study and report, unique to each water system that provides basic information about the water used to provide drinking water. The Source Water Assessments:

- Identify the area of land that contributes the raw water used for drinking water,
- Identify potential sources of contamination to drinking water supplies, and
- Provide an understanding of the drinking water supply's susceptibility to contamination.

This information can help communities understand the potential for contamination of their drinking water supplies and can be used to prioritize the need for protecting drinking water sources.

## Information About Contaminants

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 EPA's Safe Drinking Water Hotline (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, 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 microbial contaminants are available from the Safe Drinking Water Hotline (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 materials, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include the following:

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 Dahlonega 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>.

\*Microbial contaminants, such as viruses and bacteria that 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 results 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 synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas 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.

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 provide the same protection for the public's health.

## Participation

Your water system is an active participant in the community. Our employees are involved in many civic organizations and are pleased to offer information and speakers to the community on water protection, water treatment, as well as provide tours of our facilities.

Your City Council meets the 1<sup>st</sup> Monday of each month at 7:00 p.m. in the Council Chambers at City Hall. Your participation or comments are welcome at these meetings.