# 2010 annual water quality report

Volume #5 - June, 2011

(consumer confidence Report)

MO3024055

This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water.

# What is the source of my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater 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.

#### **Source Water Assessment:**

The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well or surface water intake and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the internet at <a href="http://maproom.missouri.edu/swipmaps/pwssid.htm">http://maproom.missouri.edu/swipmaps/pwssid.htm</a>. To access the maps for your water system you will need the State-assigned identification code, which is printed at the top of this report. The Source Water Inventory Project maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed.

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 (800-426-4791).

Our water comes from the following groundwater wells:						
McTURNAN	HARMON					
TRIMBLE	GILLESPIE					
LIBERTY	WOODHAVEN					
SOUTH	AIRPORT					
SAPP	ELM TREE					
КОСН	BOTNER					
BETHEL	ROUTE E					

Contaminants that may be present in groundwater include:

- A. <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. <u>Inorganic contaminants</u>, 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.
- C. <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. <u>Radioactive contaminants</u>, 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, the Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## Do I need to take any 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/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).

## **Special Lead and Copper Notice:**

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. CPWSD No. 1 of Boone County 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 (800-426-4791) or at <a href="http://water.epa.gov/drink/info/lead/index.cfm">http://water.epa.gov/drink/info/lead/index.cfm</a>.

## How might I become actively involved?

If you would like to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at 573-449-8723 to inquire about scheduled meetings or contact persons.

# **Violations and Health Effects Information:**

NO VIOLATIONS OCCURRED IN CALENDAR YEAR 2010.

# CPWSD NO. 1 OF BOONE COUNTY, MISSOUNI 2010 annual water quality Report

(consumer confidence report)

## contaminants Report 2010

#### **Definitions:**

MCLG	Maximum Contaminant Level Goal, or 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.
MCL	Maximum Contaminant Level, or 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.
90th % (Percentile)	For lead and Copper testing. 10% of test results are above this level and 90% are below this level.
Level Found	is the average of all test results for a particular contaminant.
Range of Detections:	Shows the lowest and highest levels found during a testing period, if only one sample was taken, then this number equals the Level Found.

## **Unit Abbreviations:**

MO3024055

PPB: parts per billion or micrograms per liter. ppm: parts per million or milligrams per liter. n/a: not applicable. nd: not detectable at testing limits.

The State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

Regulated	Collection	Highest	Range	Unit	MCL	MCLG	Typical Source
ANTIMONY, TOTAL	3/3/2009	1.19	0 - 1.19	ppb	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC	12/10/2009	5.73	4.96 - 5.73	ppb	10	n/a	Erosion of natural deposits
BARIUM	3/3/2009	0.0955	0.00436 - 0.0955	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	12/10/2009	2.47	2.41 - 2.47	ppb	100	100	Discharge from steel and pulp mills
FLUORIDE	3/3/2009	1.63	0.65 - 1.63	ppm	4	4	Natural deposits: water additive which promotes strong teeth
SELENIUM	12/10/2009	0.95	0.4 - 0.95	ppb	50	50	Erosion of natural deposits

Radionuclides	Collection	Highest	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM	10/6/10	2.8	0 - 2.8	pCi/L	5	0	Erosion of natural deposits
COMBINED URANIUM	2/27/2006	1.4	0 - 1.4	μg/L	30	0	Erosion of natural deposits
GROSS ALPHA, EXCL. RADON & URANIUM	3/4/2009	8.7	2.1 - 8.7	pCi/L	15	0	Erosion of natural deposits
GROSS ALPHA	10/6/10	6.8	0 - 6.8	pCi/L			Erosion of natural deposits
RADIUM-226	10/6/10	2.8	0- 2.8	pCi/L	5	0	
RADIUM-228	3/4/2009	1.2	0.5 - 1.2	pCi/L	5	0	

Lead and Copper	Date	90th %	Range	Unit	AL	Sites	Typical Source
LEAD	2008-2010	6.83	1.08-17.2	ppb	15	1	Corrosion of Household Plumbing Systems
COPPER	2008-2010	0.0968	0.00686-0.155	ppm	1.3	0	Corrosion of Household Plumbing Systems

**Disinfection By Products** [ No Detected Results were found in Calendar Year 2010 ]

Microbiological [No Detected Results were found in Calendar Year 2010]

President Jerome Glascock
Vice President Jerome Glascock
Wembers Gary Phillippe
Jane Sapp
John Spry
General Manager Bob Leonard
Clerk Janet Sears
Telephone 573.449.0324

9246.924.888

РРЕ 50 ВТ В ТР В ТР В ТР В ТР В ТР В В ТР В

Consolidated Water District No. 1 of Boone County 1500 N. Seventh Street Columbia, MO 65201