

# Bell Buckle Water System Water Quality Report 2008



- **Is my drinking water safe?**

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the charts below, we found all of these contaminants at safe levels.

- **What is the source of my water?**

Your water, which is surface water, comes from the Duck River at the Halls Mill community. We have two hook-ups with BCUD. One is located at Anthony Rd and the other is at Hwy 82 and Adams Lane. We are also connected to Wartrace Water which comes from Cascade Spring located at Cascade Road in Normandy. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water supply to *potential* contamination. The TN Department of Environment and Conservation (TDEC) have prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to **potential** contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Bell Buckle Water System sources were rated as moderately susceptible to potential contamination.

You may contact the Water System to obtain copies of specific assessments, or an explanation of TN's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at [www.state.tn.us/environment/dws/dwassess.shtml](http://www.state.tn.us/environment/dws/dwassess.shtml).

- **Why are there contaminants in my water?**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. 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).

- **For more information about your drinking water, please call Ronnie Lokey at 389-9513. Este informe contiene informacion muy importante. Traduscalo o hable con alguien que lo entienda bien.**

- **How can I get involved?**

Our Board meets on the second Tuesday of each month at 6:00 PM in the Town Hall in Bell Buckle. Please feel free to attend these meetings.

- **Is our water system meeting other rules that govern our operations?**

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements.

- **Other Information**

Due to all water containing dissolved contaminants, occasionally your water may exhibit slight discoloration. We at Bell Buckle Water System work around the clock to maintain standards to prevent this and to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to (931)-389-9513 or 931-389-9566 or 931-703-3587.

- **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 not only their drinking water, but also food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## W a t e r   Q u a l i t y   D a t a

### What does this chart mean?

- **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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- **MRDL**: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- **MRDLG**: Maximum residual disinfectant level goal. The level of a 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.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.
- Parts per million (ppm) or Milligrams per liter (mg/l) – explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.
- Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **TT** - Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

**BCUD Test Results**

| Contaminant            | Violation Yes/No | Level Detected | Range of Detections | Date of Sample | Unit Measurement | MCLG | MCL | Likely Source of Contamination  |
|------------------------|------------------|----------------|---------------------|----------------|------------------|------|-----|---|
| Turbidity <sup>1</sup> | N                | .84            | 0.02-0.84           | 2008           | NTU              | n/a  | TT  | Soil runoff   |
| Fluoride               | N                | 2.0            | 0.10-2.00           | 2008           | ppm              | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Sodium                 | N                | 4.3            |                     | 2008           | ppm              | N/A  | N/A | Erosion of natural deposits; used in water treatment  |
| Total Organic Carbon   | N                |                |                     |                | ppm              | TT   | TT  | Naturally present in the environment.   |
| Atrazine               | N                | .58            |                     | 2008           | ppm              | 3    | 3   | Runoff from herbicide used on crops   |
| Nitrate (as Nitrogen)  | N                | 1.5            |                     | 2008           | Ppm              | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits                               |

1. 99.6% of Bedford County Utility District samples were below the turbidity limit.

**Wartrace Test Results**

| Contaminant            | Violation Yes/No | Level Detected | Range of Detections | Date of Sample | Unit Measurement | MCLG | MCL | Likely Source of Contamination   |
|------------------------|------------------|----------------|---------------------|----------------|------------------|------|-----|--|
| Turbidity <sup>1</sup> | N                | 5.5            | .03-5.5             | 2008           | NTU              | n/a  | TT  | Soil runoff  |
| Fluoride               | N                | 0.86           | 0.599-0.86          | 2008           | ppm              | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth              |
| Sodium                 | N                | 15             |                     | 2007           | ppm              | N/A  | N/A | Erosion of natural deposits; used in water treatment                                 |
| Nitrate (as nitrogen)  | N                | 1.1            |                     | 2008           | ppm              | 10   | 10  | Runoff from fertilizer use; leaching from septic sewage; erosion of natural deposits |

1. At least 95% of Wartrace's samples were below the turbidity limit. Turbidity has no health effects. However, turbidity can interfere with disinfection & provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses & parasites that cause symptoms such as nausea, cramps, diarrhea, & associated headaches.

**Bell Buckle Test Results**

| Contaminant                     | Violation Yes/No | Level Detected            | Range of Detections | Date of Sample | Unit Measurement | MCLG | MCL                | Likely Source of Contamination   |
|---------------------------------|------------------|---------------------------|---------------------|----------------|------------------|------|--------------------|--|
| Total Coliform Bacteria**       | N                | 3                         |                     | 2008           |                  | 0    | <1 Positive Sample | Naturally present in the environment   |
| Lead*                           | N                | 90 <sup>th</sup> % = .5   |                     | 2006           | Ppb              | 0    | AL=15              | Corrosion of household plumbing systems, erosion of natural deposits                                   |
| Copper*                         | N                | 90 <sup>th</sup> % = .051 |                     | 2006           | Ppm              | 1.3  | AL=1.3             | Corrosion of household plumbing systems, erosion of natural deposits; leaching from wood preservatives |
| TTHM (Total trihalomethanes)*** | N                | 56.5 Ave                  | 14.6-131.0          | 2008           | Ppb              | n/a  | 80                 | By-product of drinking water disinfection  |
| Haloacetic Acids (HAA5)         | N                | 39.7 Ave                  | 14.8-88.5           | 2008           | Ppb              | n/a  | 60                 | By-product of drinking water disinfection  |
| Chlorine                        | N                | 2.1 Ave                   | 1.5-2.8             | 2008           | ppm              | 4    | 4                  | Water additive used to control microbes  |

\* During the most recent round of lead and copper testing, 0 out of 10 households sampled exceeded the lead and copper action levels. If present, elevated levels of lead can cause serious health problems, especially for pregnant women & young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Bell Buckle Water System 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>.

\*\* Bell Buckle had a positive Total Coliform sample in the months of April, June & July. All repeat samples were negative.

\*\*\* While your drinking water does meet EPA's standard for TTHMs, it does contain low levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of cancer.