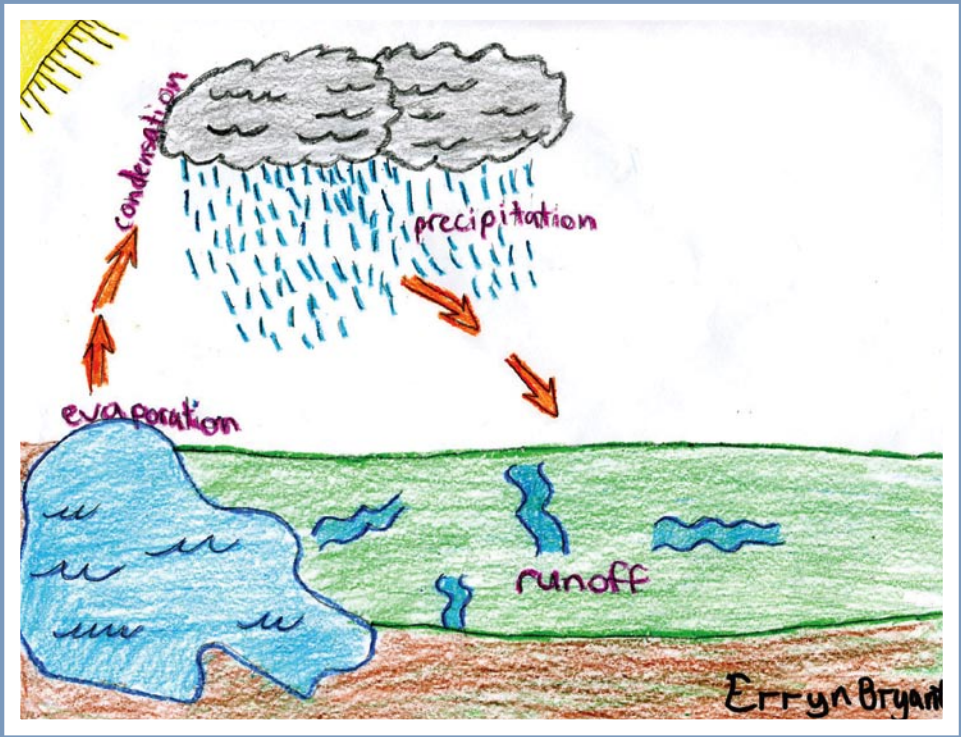
2010 MWS Contest Winner, Erryn Bryant, Alex Green Elementary School




# Water...the real taste of life!

## 2010 CONSUMER CONFIDENCE REPORT

METRO WATER SERVICES

# Delivering A Clean and Safe Water Supply

At Metro Water Services, our top priority is to provide our customers with a clean and safe water supply. As a department of the Metropolitan Government of Nashville and Davidson County, we service 176,121 water accounts, providing drinking water to customers in Davidson County and portions of Rutherford and Williamson counties.

We are pleased to deliver our 2010 Consumer Confidence Report, which shows your water meets or exceeds all of the United States Environmental Protection Agency (EPA) health standards and all state and federal requirements. For more information about Metro Water Services and the quality of your water, visit our Web site at www.nashville.gov/water.

**Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.**

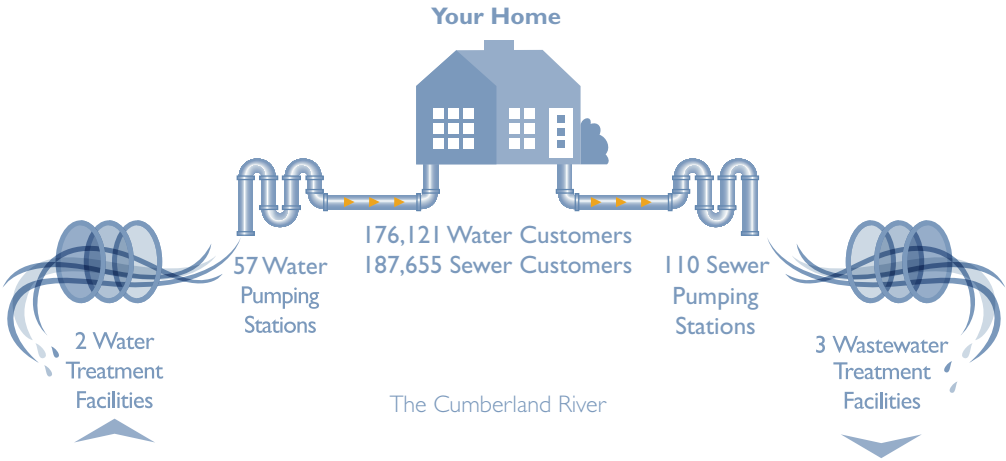
**Important Health Information »** Some people may be more vulnerable to impurities in drinking water than the general population. Immuno-compromised persons such as cancer patients undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at-risk for infection. These people should seek advice from their health care providers about drinking water.

# The Journey of Your Water

Nashville's water supply comes from the Cumberland River, which provides a steady and excellent source of water for both the K.R. Harrington and Omohundro water filtration plants.

As the water journeys from the river to your tap, it goes through several steps to ensure its quality. First, it is screened to remove twigs and other sizable objects. Next, chemicals, known as coagulants, are added to the water and mixed well. As these chemicals leave the water, they remove contaminants such as mud and algae.

The water then slowly flows through settling tanks, where larger particles are allowed to sink to the bottom. The water from the settling tanks passes through filters and becomes crystal clear. Before it enters the distribution system, a small amount of chlorine and fluoride are added to prevent bacteria from developing and help in preventing tooth decay.



# Drawing From the River

**Nashville is fortunate to have the Cumberland River as its abundant supply of water. The EPA has given the Cumberland River a good grade for water quality.** For more information, visit http://cfpub.epa.gov/surf/huc.cfm?huc_code=05130202.

The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. A copy of the Water Assessment Report will be available for review at Metro Water's Administrative Library, located at 1600 Second Ave. North. A source water assessment summary is available at www.state.tn.us/environment/dws/dwassess.shtml.

The Cumberland River Source is rated highly susceptible to potential contamination. Metro Water Services has two water treatment plants and has the ability to withdraw water from more than one river level to minimize the chance of contamination.

**Cryptosporidium »** No cryptosporidium oocysts were detected in untreated river water during 2008 testing. 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 at 1-800-426-4791.

**Lead Levels »** 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. Metro Water Services 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 drinking 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 form the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

# Water Quality Table

MWS tests for 105 contaminants that may be present in drinking water. The tables below show those contaminants that were detected January 1 through December 31, 2009, all of which were at safe levels. If you would like a complete list of all substances for which we test, please call (615) 862-4494 to request a Water Quality Letter, or visit our Web site at www.nashville.gov/Water.

Metro Nashville's Water Department #1 is required by state and federal regulations to test for specified unregulated organic and inorganic chemicals. This testing has been performed and reported. All results are available for public inspection at Metro Water Services, Central Laboratory, 1600 Second Ave. North. For more information, please contact the MWS Lab at 862-4591 or visit our Web site at www.nashville.gov/Water.

| REGULATED AT THE WATER TREATMENT PLANT | | | | | |
|---|---|---|---|---|---|
| **Parameter and Units of Measure** | **Highest Average Level Detected** | **Range of Levels Detected** | **MCL** | **MCLG** | **Major Sources of the Substance** |
| Fluoride (mg/L) | .99 | 0.85 - 1.11 | 4 | 4 | Water additive that promotes strong teeth |
| Nitrate (mg/L) | 0.40 | 0.35 - 0.46 | 10 | 10 | Runoff from fertilizer use |
| Sodium (mg/L) | 5.6 | 4.0 - 7.9 | N/A | N/A | Natural deposit erosion |
| Turbidity (NTU) | 0.09 | 0.02 - 0.24 | TT = 1 NTU | 0 | Natural river sediment. Turbidity is a measurement of water clarity, which aids in determining the effectiveness of our filters. |
| | 100.0% | N/A | TT = % of samples <0.3 NTU | | |
| **REGULATED IN THE DISTRIBUTION SYSTEM** | | | | | |
| Total Coliform | 0.03% | N/A | 5% | 0% | Human and animal fecal waste |
| Total Trihalomethanes (THM) (µg/L) | 33.0 | 13.5 - 67.9 | 80 | 0 | Disinfection chemical (chlorine) combining with organic matter in the river water |
| Total Haloacetic Acids (HAA) (µg/L) | 27.6 | 12.7 - 55.4 | 60 | 0 | |
| Chlorine (mg/L) | 1.91 | 0.0 - 4.0 | MRDL - 4 | MRDLG - 4 | Water additive used to control microbes |
| Total Organic Carbon* (mg/L) | N/A | N/A | TT | N/A | Naturally present in the environment |
| **REGULATED AT THE CUSTOMER'S TAP** | | | | | |
| **Parameter** | **90th Percentile** | **Sites Exceeding AL** | **MCL** | **MCLG** | **Major Sources of the Substance** |
| Copper (2007 analyses) (mg/L) | 0.280 | 0 of 50 | AL = 1.3 | 1.3 | Corrosion of household plumbing systems |
| Lead (2007 analyses) (µg/L) | 2 | 0 of 50 | AL = 15 | 0 | |

**Note:** During the last half of 2009, Metro Water Services – Central Laboratory was downgraded to Provisional Status for metals (Standard Methods: 3111B, 3111D, 3113B, EPA 245.2 and EPA 200.9) and Haloacetic Acids -5 (EPA Method 552.2). The laboratory has been upgraded to Re - Certified after correcting the deficiencies. All data remained valid and no adverse health effects occurred.

* We met the treatment technique requirement for total organic carbon.

## Terms Used In This Report

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

**(mg/L):** Milligrams per Liter or parts per million.

**(µg/L):** Micrograms per Liter or parts per billion.

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

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

**NTU (Nephelometric Turbidity Units):** Standard units for measurement of water clarity.

**pCi/l (Picocuri per liter):** Unit of measurement for radioactive substances.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health.

# Sources of Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain impurities in water provided by public water systems. The Food and Drug Administration regulates bottled water.

The sources of drinking water (both tap water and bottled water) include lakes, streams, ponds, reservoirs, springs, wells, and, in Nashville's case, the Cumberland River. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and can pick up substances resulting from the presence of animals or from human activity. Impurities that may be present in source water include:

- Biological contaminants, such as viruses and bacteria, which may come from septic systems, sewage treatment plants, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm run-off, 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, storm water run-off and residential uses.
- Organic chemicals, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water run-off and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Every day, seven days a week, samples of river, treated and finished water are tested in our laboratories to ensure the highest quality for our customers.

**More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.**

## Important Numbers

**Communication Services**
**(615) 862-4494**
*Educational programs about water, stormwater and wastewater or questions about your water quality report*

**Customer Service Center**
**(615) 862-4600**
*To start or change water service or inquire about your water bill*

**24-Hour Emergency Number**
**(615) 862-4600**
*Construction questions, water quality concerns or to report a leak in the street*

**Customer Connections**
**(615) 862-7225**
*Water and sewer connection permits*

**Backflow Preventer Inspection**
**(615) 862-4562**

**Central Laboratory**
**(615) 862-4591**

### Public Participation

The public may participate in decisions concerning water quality by attending the Metropolitan Council meetings held on the first and third Tuesdays of each month in the Council Chambers in the Metro Courthouse, One Public Square.

### ADA Information

If you need assistance or an accommodation, please contact Joseph A. Estes, Sr., 1600 Second Ave. North, Nashville, TN 37208-2206 or (615) 862-4862.
Visit our Web site at www.nashville.gov/water

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METRO WATER SERVICES