



BROAD CREEK

Public Service District

July 2011

(System #0720009)

Annual Drinking Water Quality Report

We are pleased to present to you this year's *Annual Water Quality Report*. This report is designed to inform you about the quality of water and the services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our wells draw from the Floridan Aquifer and are supplemented with water purchased from Beaufort - Jasper Water & Sewer Authority; which is treated surface water from the Savannah River.

The source water protection plan for our system is available for your review through the South Carolina Department of Health and Environmental Control website at www.scdhec.gov/water/html/srcewtr.html.

We are pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Linda Dean at (843) 785-5016. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are usually held on the second Friday of each month at 9:00 A.M. in the conference room of Broad Creek PSD.

BCPSD routinely monitors for contaminants in your drinking water according to Federal and State laws. These tables show the results of our monitoring for the period of January 1st to December 31st 2010, or as shown in the tables. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

These Test Result tables list the contaminants which were detected and the level at which the detection occurred. For brevity, we have only listed the contaminants which were detected within the past year's tests or the latest test for the contaminant with the exception of microbiological contaminants, which were not detected. In these tables you

will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - 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 (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level - The "Maximum Allowed" (**MCL**) is 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.

Maximum Contaminant Level Goal - The "Goal" (**MCLG**) is 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.

Health Information

Inorganic Contaminants:

(1) **Copper.** Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal physician.

(2) **Lead.** Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

(3) **Fluoride.** Some people who drink water containing fluoride in excess of the MCL over many years could get bone

disease, including pain and tenderness of the bones. Children may develop mottled teeth.

(4) **Nitrate.** 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.

(5) **Cadmium.** Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

(6) **Thallium.** Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

Volatile Organic Contaminants:

(7) **Total Trihalomethane. TTHM.** Some people who drink water containing total trihalomethane 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 developing cancer.

(8) **Haloacetic Acid. HAA5.** Some people who drink water containing haloacetic acid 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 developing cancer.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **Environmental Protection Agency's Drinking Water Hotline at (800) 426-4791.**

MCL's are set at very stringent levels. To better 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 the described health effect.

Annual Water Quality Report Continued...

Lead: 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. BCPSD 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 drinking water, you may wish to have your water tested. For more information on lead in drinking water, testing methods, and steps you can take to minimize exposure call the Safe Drinking Water Hotline at (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

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 advise about drinking water from their health providers. EPA/CDC offer guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

TEST RESULTS FLORIDAN AQUIFER (0720009)

Contamination	Violation Y/N	Level Detection	Unit of Measurement	MCLG	MCL	Comments
Inorganic Contaminants						
1. Copper (2010)	NO	0.125	ppm	1.3	AL = 1.3	Value in Level Detection column is the 90th percentile value. No sites had copper levels detected above the Action Level value. Corrosion of household plumbing systems, erosion of natural deposits.
2. Lead (2010)	NO	3.0	ppb	0	AL=15.0	Value in Level Detection column is the 90th percentile value. No sites had lead level detected above the Action Level value. Corrosion of household plumbing systems, erosion of natural deposits.
3. Fluoride (2009)	NO	0.7 Range 0.69 - 0.7	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from the fertilizer and aluminum factories.
4. Nitrate (2010)	NO	0.053 Range ND - 0.053	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Volatile Organic Contaminants (2010)						
7. TTHM (Total Trihalomethane)	NO	Running Annual Average 22 Range 10.02 - 30.95	ppb	0	80	By-product of drinking water disinfection.
8. HAA5 (Haloacetic Acid)	NO	Running Annual Average 14 Range 6.4 - 20.9	ppb	0	60	By-product of drinking water disinfection.

TEST RESULTS SAVANNAH RIVER WATER SOURCE BJWSA (0720003)

Contamination	Violation Y/N	Level Detection	Unit of Measurement	MCLG	MCL	Comments
Inorganic Contaminants (2010)						
3. Fluoride	NO	0.83 Range ND - 0.83	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
4. Nitrate	NO	0.39 Range ND - 0.39	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
5. Cadmium	NO	0.12 Range ND - 0.12	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paint.
6. Thallium	NO	0.69 Range 0.69 - 0.69	ppb	0.5	2	Discharge from electronics, glass and leaching from ore-processing sites; drug factories.

As you can see by the tables, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water **IS SAFE** at these levels.

Please call our office if you have any questions.

We at BCPSD work around the clock to provide top quality water to every tap. We ask that all of our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Broad Creek PSD

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