

Water & Wastewater 101

Fact Sheet

WHAT YOU NEED TO KNOW ABOUT YOUR WATER SYSTEM

While all recognize the need for clean water and appreciate that our wastewater disappears down the drain, few are aware of the complex systems in place to make this happen. From the time treated drinking water passes through the water meter until the wastewater reaches the sewer tap on the sewer main, the water and plumbing lines are the responsibility of the property owner. This makes you the operator of your own private water system. The Cobb County Water System has indentified nine simple things you need to know to better manage your system.

WATER 101



In Cobb County, water is obtained from the Chattahoochee River and Lake Allatoona.

The Cobb County Water System purchases treated drinking water from our wholesale provider, the Cobb County-Marietta Water Authority (CCMWA), and works with CCMWA in distributing clean, safe water to Cobb customers. CCMWA cleans the raw river or lake water at two treatment facilities. The James E. Quarles Treatment Plant on Lower Roswell Road in Marietta treats water withdrawn from the Chattahoochee River. The Hugh Wyckoff Treatment Plant is located on Mars Hill Road in Acworth and treats Lake Allatoona water.

Backflow prevention keeps contaminants from being siphoned into the water supply.

When water passes through a water meter into a customer's home or business, it should not flow back into the County water main. If it does, the condition is referred to as "backflow", and the reversed water can contaminate the drinking water supply. There are two types of backflow conditions: back pressure and back siphonage. Back pressure occurs when the pressure in the consumer's line is greater than the pressure in the public water system's line. For example, pumping well water, gray water, or rain water for irrigation at a high pressure can create back pressure, possibly resulting in the irrigation water being pumped into the drinking water line. Back siphonage occurs when the pressure in the public water system drops as a result of a water main break, freezing pipes, or unexpectedly high demand, causing water to flow in a reversed direction. Backflow prevention devices are installed at water meters to prevent backflow and protect our water supply.



Water pressure is controlled by a Pressure Reduction Valve (PRV).

Uncontrolled high water pressure can rupture pipes, damage fixtures, and cause water loss. Every home should have a functioning PRV to ensure water pressure is maintained at 80 psi or below. Before you repair leaks, check the water pressure in your home to ensure the PRV is functioning properly. Use a water pressure test gauge to measure the water pressure at the outdoor spigots at the front and back of your house. The PRV is typically located after the front spigot, so the pressure reading at the front of your house is usually higher. The reading at the back of the house, after the PRV, should be 80 psi or lower if the PRV is working properly. If the reading at the back of the house is above 80 psi, the PRV needs to be adjusted or replaced. Check your water pressure before repairing leaks to ensure the leaks were not caused by high pressure, otherwise the high pressure may continue to cause leaks.

Water from the water heater is *non-potable* (not drinking water quality).

Do not use the hot water tap for food and beverage preparation. Sediments, metals, bacteria, and other pathogens can be present in the water heater tank and hot water pipes, making the water unsafe for cooking and drinking. The hot water line is for bathing, cleaning, and washing only. Use cold water when brushing teeth, drinking, and making food. When preparing food and hot beverages, always begin with cold water, then heat in a kettle, microwave, or pot.



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WASTEWATER 101

In Cobb County, wastewater is treated at one of four Water Reclamation Facilities (WRF).

The Cobb County Water System operates and maintains approximately 2,500 miles of sanitary sewer lines and thirty-eight wastewater lift stations. The sewer collection system includes a network of pipes that are connected to sinks, toilets, showers, tubs, and some appliances from the home. Anything that goes down the drain enters this sewer collection system. The sewer pipes move wastewater from homes and businesses to one of the County's four WRFs. At the WRFs, wastewater is treated to remove solids, reduce pollutants, disinfect, and restore oxygen. It is then released back into the environment. Approximately 26 billion gallons of wastewater are generated and treated in the County annually. In Cobb, treated water is released into the Chattahoochee River, Lake Allatoona, and Noonday Creek.



Manage Fats, Oil and Grease (FOG) in your kitchen.

Anything that clogs arteries also clogs pipes. FOG sticks to the walls of sewer pipes and builds up over time. As the FOG collects, it restricts the flow of wastewater and can cause sewer overflows and backups into homes, businesses, and the environment. Sources of FOG include ice cream, cheese, peanut butter, gravy, salad dressing, cooking oil, and meat. Never pour FOG down the drain, wipe all scraps and excess FOG into the garbage before washing dishes, avoid using your garbage disposal, use a sink strainer, and empty the contents of sink strainers into the trash or compost bin.

Never flush any type of wipe, cloth, towelette, or pad.

Wipes should not be flushed. While the packaging may say "flushable," the material does not break down like toilet paper. These products cause blockages in sewer pipes and can result in a sewage backup into the home. Always throw used wipes into the garbage.



Be aware of Pharmaceuticals and Personal Care Products (PPCPs).

Traces of chemical compounds from PPCPs are being detected in our water sources.

Pharmaceuticals are commercial drugs and medications used by humans and animals. Personal care products include a wide variety of compounds, such as perfumes, shampoos, hair sprays, make up, sun screens, and body lotions. PPCPs are excreted in human or animal waste and are rinsed from our bodies and washed down the drain into the sewer system. Since wastewater treatment facilities are typically not equipped to remove

PPCP compounds from wastewater, these compounds can enter our waterways. Septic tank systems have the potential to contaminate the surrounding soils, surface water, and ground water because they do not remove pharmaceuticals and non-biodegradable chemicals. Instead of flushing unused medications down the drain, make them undesirable for consumption by mixing with soap and discarding in a sealed container in the garbage. If possible, limit the amount of personal care products you and your family use and purchase products that are environmentally friendly, such as items that do not contain antibacterial or antifungal agents or perfumes.

Are you on septic or sewer?

Septic tank systems are small scale wastewater treatment systems, and property owners are responsible for maintaining their systems. Many factors impact the effectiveness of the system, including volume of water used; number of people in the home; condition of the drainfield; and presence of tree roots in the pipes, tank, and drainfield. Also, septic tank systems require routine pumping every 3-5 years to remove accumulated solids. Since septic tank systems treat sewage onsite, any problems that develop within your system occur on your property. If you don't know whether you are on septic or sewer, look at your water bill. Homes with septic tanks do not pay sewer treatment fees. Those on sewer pay for treatment at one of Cobb's four WRFs.

| TOTAL AMOUNT DUE | | 152.46 | | | - | | | | | | | _ | _ | _ |
|---|------------|--------|----------|--|--------|------------------|--|---------|-----------------|---------|---------------------|--------|--------|------------------|
| Current Amount Due | | | 152.46 | | Jan 09 | Feb 09 Mar 09 | Apr 09 | May 09 | Jul 09 | Aug 09 | | Nov 09 | Dec 08 | Jan 10 |
| Street Light | | | 3.50 | 0 | _ | | 4 | | ц | | _ | _ | | |
| Sewer | 15,000 gal | (5.41) | | 4 | | | П | | | 1 | и | | | |
| Cost Of Basic Service | | | 7.00 | | | П | П | | N | - 1 | | | | |
| Water (Tier Two) | 12,000 gal | (4.36) | 52.32 | 8 | 4 | | | | | | | | | |
| Water | 3,000 gal | (2.83) | 8.49 | 12 | | | | | | | | | | |
| Current Sun | mary of Ch | arges | | 16 | | | | | | | | | | |
| Januara T ormana | | | 0.00 | | | | | | | | | | | 4 |
| Balance Forward | | | | 20 1 | _ | | | | | _ | _ | _ | _ | \neg |
| | | | 52.69 | | | 13 | Month | Coms | sumpti | ion (10 | 00 Gall | ons) | | |
| | 0002 | 00477 | 52.69 | | | | | | 7 | | | Á | 7 | _ |
| Account Number: Previous Balance Payments / Credits | 0002 | | | 13 | Month | Come | sumpti | ion (10 | 00 Gall | ons) | | | | |
| Account Activity | | Stater | nent | | | | | | | | | | | |
| Free, Easy, Secure and Co. | | | | | | | | | | | | | | |
| Make Payments Review Consumption His | ton | | | | | | | | | | | | | |
| View Your Bill Make Payments | | | | Service Lo | catio | n: | | | | | | | | |
| Visit www.CobbWater.org View Your Bill | | | 01/17/12 | | | 01/31 | /12 | | | 33 | | | | |
| | | | | Statemen | | e [| Due D | | | | | | | eriod |
| 660 South Cobb Dr SE Marietta GA 30060-3105 | | | | 8 am - | | У | | | - Fria - 6 p | | Fax: | | | 423-10 419-63 |
| Cobb County Water System | | | | Inside Office Hours Monday - Friday | | | Drive - Through Hours Monday - Friday | | | | Office: 770-423-100 | | | |

Sample water bill.