

The Water Source



SPRING & SUMMER 2013

PUBLIC WATER SUPPLY DISTRICT NO. 3 OF JOHNSON COUNTY

Outdoor Saving Tips

With summer quickly approaching some consumers notice an increase in water usage. There are usually several reasonable explanations for the increased usage such as washing vehicles, filling swimming pools, or watering plants. Here are a few helpful outdoor tips to keep the cost down on the water bill.

Rain Gauge – A rain gauge is a low-cost, reliable device for measuring the water your lawn gets from rainfall. If you receive an inch or more within a week, you can skip your next watering.

Brooms – Use a broom to clean your driveway or sidewalk between rain showers instead of a hose.

Shut-Off Device – Nothing wastes water like using your sprinkler system in the rain. Install a rain shut-off device on your automatic sprinklers to eliminate unnecessary watering.

Sprinkler Timers – A sprinkler timer can be set to shut off your sprinkler after a set amount of time.

Use sprinklers that throw big drops of water close to the ground. Smaller drops of water and mist often evaporate before they hit the ground.

Soil Aerator – This tool will punch holes in your lawn about six inches apart so water will reach the roots rather than run off the surface.

Rain Barrels – Put the water from your downspout to good use by catching it in a mosquito-proof rain barrel.

Gutter Diverters – A gutter diverter is designed to work with a rain gutter down spout, and has a switch that diverts the water to the landscape or to the rain barrel.

Time to Water – The best time to water your lawn is early in the morning before it gets too hot or later in the evening once temperatures have cooled down. Try not to water your lawn on windy days. Position your sprinkler in the best position so you are not watering sidewalks, driveways, or streets.



Mowing over the Water Meter

If your mower happens to come into contact with a meter lid please contact our office immediately.

Public Water Supply District No. 3 would like to remind customers to take extra precaution this spring and summer when mowing near the water meter. The majority of our meters are read remotely by use of radio technology. The unit that allows this technology to be

used is located on the lid of the water meter pit. PWSD #3 recommends using a weed eater around the meter instead of mowing over it.

Mowing over a meter lid may cause damage to the meter and mowing equipment. The cost to repair or replace a meter and/or meter lid could be assessed for negligent actions.

Hickory Hills Wastewater Project

Public Water Supply District No. 3 has made substantial progress in our pursuit of funding to take the required action to remedy the Hickory Hills wastewater situation. We are pleased to say our application for grant funding from the Community Development Block Grant Program (CDBG) has been submitted. Thank you to everyone who helped with the application process by participating in our public hearing.

To meet USDA and CDBG requirements, Hickory Hills wastewater will now be billed at a base rate plus \$3.00 per additional 1,000 gallons.

PWSD #3 has an estimated timeline to begin construction of the wastewater treatment plant in March 2014.



Summer Time Cool Down Fun

On hot summer days everyone tries to find ways to cool off. The initial cost of purchasing a swimming pool or a yard toy that uses continuous water may not be as expensive as they once were. However, filling a swimming pool can be more costly

than expected. Before purchasing these items consider all of the costs.

Here is how to determine how many gallons your pool could potentially hold:

Round, Oval Pools — Average Length x Average Width x Average Depth x 5.9

Rectangular Pools — Length x Width x Average Depth x 7.5

Not only can a swimming pool add costs to your water bill but sprinklers or toys that continuously use water can increase your monthly water usage. The average sprinkler will use in excess of 240 gallons of water per hour.

The number 1 question PWSD No. 3 receives from customers in the Spring and Summer months is if we offer a discount to fill a swimming pool. Unfortunately PWSD No. 3 does not offer any discount for filling pools.

Pool Size	Gallons	Cost
12 ft. Round	3,200	\$36.45
15 ft. Round	5,000	\$49.33
18 ft. Round	7,200	\$65.08
21 ft. Round	9,800	\$83.69
24 ft. Round	12,800	\$105.16
27 ft. Round	16,200	\$129.49
30 ft. Round	20,000	\$156.69



Where is Your Water Going?

On average, each person uses 40—80 gallons of water **per day**.

Here is how it breaks down:

Bathing: 15—25 gallons

Sink: 3—5 gallons

Toilet: 5—15 gallons

Washing Clothes: 10—20 gallons

Washing Dishes: 5—10 gallons

Cooking: 1—2 gallons

Miscellaneous: 1—3 gallons

It's Only A Small Drip Right?

Slow drips of water can add up quickly. A sink faucet that drips after it is turned off or a toilet that continues to run can waste thousands of gallons of water a year. One of the most costly household wastes of water is a leaky toilet. According to the American Water Works Association (AWWA), toilets account for 45% of all indoor water use in a typical residence. It is estimated that 20% of all toilets leak. **Depending on water pressure, a running toilet can leak 1 gallon of water per minute which adds up to 1,440 gallons per day.** A leak will not go away on its own so to save money it is always in your best interest to repair all water leaks.

Leak Source	Typical Leakage	Gallons/Day Used	Gallons/Month Used
Running toilet	1 gallon/minute	1,440	43,200
Leaking faucet	1 drip/second	9	259
Leaking showerhead	10 drips/minute	1.4	43
In-ground irrigation	1/32" in diameter (about the thickness of a dime)	210	6,300
Overflow tube in toilet tank	1/4" in diameter	7,200-8,640	216,600-259,200
A garden hose left running or a missing sprinkler head	1/2" in diameter	14,440-17,280	433,200-518,400

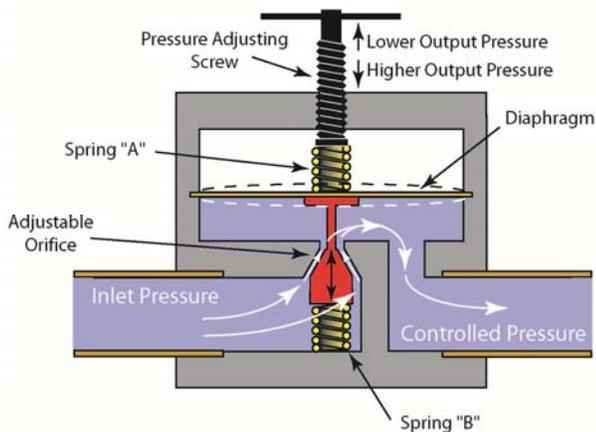
Two Items Every Home Should Have

Every home should have a pressure regulator and a thermal expansion tank. If your home is not equipped with these items you may consider having them installed. For more information please visit the water quality page at: pwsd3.com.

Pressure Regulator

A water pressure regulator is a compact, inexpensive device that controls the amount of pressure that is allowed to flow through your water pipes.

Having high water pressure is not only damaging to your water pipes but can also add to the cost of water and energy bills. High water pressure can cause banging water pipes, leaking water pipes, dripping faucets, and excessive dishwasher and clothes washer noise and/or breakdowns. Typically anything above 60 lbs. of pressure is considered to be high. Maintaining a set pressure in the home helps to insure that the home piping and appliances operate under a moderate and safe pressure.



Thermal Expansion

Thermal expansion occurs in all systems. When the heating element significantly raises the temperature of the water, the volume of the water increases. During no-flow periods in a system, pressure reducing valves, backflow preventers, and other one-way valves prevent the expanded water from returning to the community water supply. Since water is not compressible, the extra volume created by expansion can cause a rapid increase in pressure in the piping. Often the pressure will exceed the setting of the temperature and pressure safety relief valve. This will result in a loss of hot water and shorten the life of the relief valve.

For example, water heated from 70°F to a thermostat setting of 140°F in a 40 gallon hot water heater will expand by almost one-half gallon.



The addition of a hot water heater expansion tank can both resolve and prevent high water pressure. Excessive pressure can seriously compromise the durability, performance and the efficiency of the system. A hot water heater expansion tank is a cost effective solution to thermal expansion and high water pressure.

Simple Steps to Reduce Consumption

Conserving water does not have to be difficult or result in any kind of hardship. One of the best ways to reduce water usage is to install efficient fixtures in bathrooms, kitchens, and other areas where water is used. If the plumbing devices in your home are more than a few years old, there is a good chance that better, lower flow options are available. You should also check regularly for leaks, replacing seals and tightening fixtures as necessary. According to the American Water Works Association (AWWA), taking these two simple steps can result in a reduction in household water usage of approximately 35%.

Always use common sense, like turning off water while brushing teeth or washing dishes. The simplest habits can turn into the best savings.

Finding ways to save water will not only cut down on your monthly water bill, but will be a boost to the environment as you conserve one of Earth's most valuable resources.

Importance of Drinking Water

H₂O - two parts hydrogen and one part oxygen. This substance commonly known as water, is one of the most essential elements to health. Water is needed by every living cell and almost every process that takes place within the body is dependent on water. Our bodies are made up of 55-70% water, but it does not replenish itself, so drinking water helps maintain that healthy balance. Without water, we would die in a few days. A mere 2% drop in our body's water supply can trigger signs of dehydration. Mild dehydration is also one of the most common causes of daytime fatigue. Thirst is a poor indicator of dehydration. By the time someone gets thirsty, it is too late.

Since water is such an important component to our physiology, it would make sense that the quality of the water should be just as important as the quantity. Drinking water should always be clean and free of contaminants to ensure proper health and wellness.

How Much Water Do We Need to Drink?

A general rule is that we should drink at least 8 glasses of water per day. Water is the most effective at replenishing lost fluids, although other liquids such as milk, soup or unsweetened fruit juices will also suffice. Caffeinated beverages do contain water but are not ideal as they act as diuretics. Water may also be obtained from food.

Certain foods contain more water than solid matter. If you do not drink enough fluids throughout the day, try to eat some of the foods that have high percentages of water content such as fruit, vegetables, fish, poultry and soft cheese.

