

WATER Works!

Provided as a public service for our neighbors and customers...

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Visit our Water
Conservation Garden
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EARTH DAY CELEBRATION AT THE GARDEN

Thirty seven years ago, in 1970, a “national observation” began that has had tremendous impact on how we view our planet. Senator Gaylord Nelson, an environmental activist in the US Senate, is credited with being the ‘father’ of EARTH DAY, which was organized to demonstrate political support for an environmental ‘agenda.’

Nelson credited “spontaneous grassroots response” as the foundation for the successful event -- held April 22, 1970 -- that involved participants from two thousand colleges and universities, approximately ten thousand primary and secondary schools, and hundreds of communities across the country. Pete Seeger was the ‘star’ at the Washington, D.C. rally and Paul Newman and Ali McGraw were featured at the New York event.

Sponsors claimed that Earth Day 1970 “brought 20 million Americans out into the spring sunshine for peaceful demonstrations in favor of environmental reform.” It is certain that the history-making celebration spawned many important laws that were passed by Congress, including the Clean Air Act and laws to protect drinking water, wild lands and the ocean. The Environmental Protection Agency (EPA) was created within three years.

The Board of WCID 132 invites our neighbors and friends to join us for **2007 EARTH DAY IN THE GARDEN** to be held on Saturday, April 28th, from 10 am to 3 pm, at 4107 Evening Trail, Spring, TX 77388. We will be joined by the **Radio Disney** troupe for great fun, music and prizes for the younger set, and we’ll have displays and information about how we can **REDUCE, REUSE & RECYCLE** in our daily lives.

The District has created a composting program that is expected



Continued on page 2

WHAT IS A BACKFLOW PREVENTER AND WHY DO YOU NEED ONE?

When water flows backwards through the water supply system, it is called backsiphonage or backflow. When that water is accidentally mixed with hazardous chemicals or bacteria, it can be dangerous...even fatal!

The danger could come from improperly installed pools and sprinkler systems. In many districts, homeowners are required to have their water district inspect a new pool or sprinkler system to help prevent this problem. (*Ask us about specific rules and regulations governing pools, spas, and irrigation systems.*)

Another potential danger to the water system comes from a surprising source. Did you know that a common garden hose could contaminate the water supply if it is connected to a harmful substance and the pressure in the water main line drops while your hose is submerged in polluted or contaminated water? The water (and whatever is in it) could be sucked back into your pipes and your drinking water supply.

Water pressure drops can happen when firefighters battle a nearby blaze or when repairs are made due to a broken water line. This contamination could come from the chemicals used to fertilize and kill weeds on your lawn. The cleansers used in your kitchen and bathroom could be hazardous if swallowed, as could bacteria in the water from your pool or waterbed.

Fortunately, keeping your water safe from these contaminants is not that difficult to do. Take the following precautions to protect your drinking water:

- ◆ Buy and install inexpensive backflow prevention devices for all threaded faucets around your home. They are usually available at hardware stores and home improvement centers.
- ◆ If you install a pool or sprinkler system, have a representative from the District inspect the device for proper installation, whether this is required or not.
- ◆ Never submerge hoses in buckets, pools, tubs or sinks.
- ◆ Always keep the end of the hose clear of possible contaminants.
- ◆ Do not use spray attachments without a backflow prevention device. The chemicals used on your lawn are toxic and can be fatal if ingested.

REDUCE, REUSE AND RECYCLE -- Goals for Each of Us

to get into full swing this spring in cooperation with area Boy Scouts. Information will be available about the importance of composting and how it can help save a significant amount of the water needed to irrigate the garden.

The North Harris County Regional Water Authority's Mobile Teaching Lab will also be there, with a wealth of water conservation information for all ages.

While it is not the District's intent to become a recycling location, we'll have lots of information and resources on hand to

identify those facilities.

Please visit our website to learn more about this event...and we hope to see you and your whole family on April 28th -- www.hcwcid132.com.

DID YOU KNOW...

- Every day, Americans buy 62 million newspapers and throw out 44 million.
- One ton of recycled paper saves 3.3 cubic yards of landfill space; 7,000 gallons of water; 17 trees; and 4,100 kilowatt-hours of electricity.
- The average person in the US throws away 4.5 pounds of trash each day. Over a year, this amounts to 1.5 tons *per person*.
- It takes 500 years to decompose styrofoam containers, and plastic takes 450 years!



SOME STRAIGHT TALK ABOUT PROTECTING A PRECIOUS NATURAL RESOURCE...

Consider this scenario -- It's early on a lovely spring morning...the birds are chirping...insects are buzzing...and households are beginning to stir. Folks are turning on their coffee makers, stepping into their morning showers, or perhaps starting a load of laundry or the dishwasher full of dinner dishes from the night before.

Then, suddenly, the stream of water in the shower slows to a trickle and appliances choke and sputter without their customary water supply. The culprit? Up and down hundreds of streets, sprinkler system controls all spring into action at the same time... sending thousands and thousands of gallons of water airborne to fall on lawns and gardens that don't even need it.

Is it possible that we'd ever really have to choose between a nice hot morning shower and watering the lawn? Absolutely. If we don't take steps to rein in our community's voracious early morning appetite for water, that choice might come up as early as this summer! Fortunately, there are some relatively simple actions we can take to get our peak water usage under control. All we need is your help.

Let's start with the easiest and most effective options.

1. Don't over-water your lawn and plants. Native grasses only need water if there is no rain for prolonged periods. In most weather conditions, it is only necessary to water twice a week. More than that "spoils" your lawn by creating a shallow root system that is always "thirsty."

2. Set your irrigation system to complete the water cycle by 4 a.m. to avoid the early morning peak demand for water.

3. Get in the habit NOW of watering only on odd or even days... Even house numbers, water on Sundays and Thursdays, and odd numbers water on Saturdays and Wednesdays. That doesn't mean you have to water on each of your odd or even days...but stick to your schedule when you do. For established lawns, there is no reason not to follow this schedule. If everyone complied, this one action could immediately cut our early morning peak demand enough to ensure adequate water through the summer.

4. Purchase and install a rain sensor for your irrigation system. This is guaranteed to save both water and money. And, you'll minimize the chance that your sprinklers come on while it is raining - which annoys anyone who appreciates this finite natural resource and hates to see it wasted.



Remember what old Ben Franklin said...

"You never miss the water 'til the well runs dry."

Our wells aren't dry yet...but let's not test Ben's theory.

The water we conserve today can serve us tomorrow!



The simple answer to how much is enough is that you should water when plants need water. Of course many variables can affect this. Different plants have different water needs. Soils have different water-holding capacities. Sprinkler systems differ. Some plants have a protective layer of mulch. As the temperature rises and the day lengthens, transpiration (water loss from the leaves) and evaporation from the soil increases. So the lawn watering schedule you might use in June will differ from how you water later in the summer.

Watering infrequently and deeply is the key to forcing grass and plants to grow deep roots so they can access water for a longer period of time and thrive through the long, hot summer. Residents who water every other day are overwatering. Air is forced out of soil that is continually saturated. Since roots need air, overwatering tends to promote very shallow roots.

As a general rule, proper watering means applying 1 inch of water per week. How long you run your sprinkler system depends on how much water the system applies. To figure out how long to run your system or sprinkler, place small empty 1 inch deep cat food or tuna cans (at least 3) over the area the sprinkler covers.

Water the length of time you think is correct. Each can should have the same amount of water,

Watering your Texas lawn...how do you know how much is enough?

about 1 inch. If the cans contain less than 1 inch of water, you need to water longer. If the cans have an uneven amount of water, the distribution of water needs adjustment.

According to the Texas Water Development Board's Lawn Watering Guide, apply enough water to wet the soil to a depth of 4-6 inches. Use a soil probe (available at most garden centers) to help determine exactly how deep the water penetrates.

Use a sprinkler that emits large drops of water that remain close to the ground, not one that sprays a fine mist into the air. Water during the early morning or evening hours since evaporation losses will be up to 60 percent higher during the day. Do not water on windy days, and set the sprinkler so that that lawn is watered, not sidewalks and driveways. Add a rain sensor for your sprinkler system.



Remember not to cut the grass too short. Longer blades of grass will reduce evaporation and root stress since shaded soil will not

dry out as quickly. Be sure to control any insects that attack your lawn quickly and completely.

A reasonable amount of fertilizing is necessary to develop the root system and to help keep the lawn healthy. Too much fertilizer, however, will lead to excessive growth, which will then require more watering. Many experts recommend leaving the grass clippings on the lawn, which will minimize the need for additional fertilizer.

Add a little color...

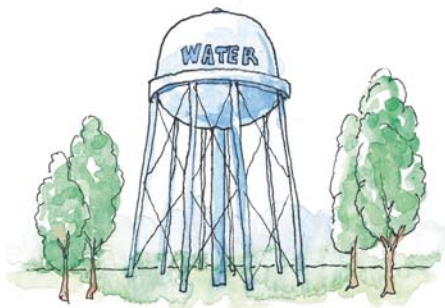


Color looks great by the front door or in the back yard where you can see it from a window or the patio, and adding a small flowerbed or a container can make a great impression. Measure the area and figure out how many square feet it is to help you determine the number of plants and how much soil amendments and mulch to purchase.

If a plant grows 2 feet wide, you need one plant every 2 feet. If the plant grows 6 inches wide, you need a plant every 6 inches.

Once plants are in the ground, cover the soil with a good layer of mulch and water it gently. The water will settle the soil and mulch. Water every day for about a week if it does not rain. 💧

Source: Texas Cooperative Extension Service and Texas Water Development Board.



Hey Kids... Here are some answers to your questions about WATER...

Q: How important are our ground water resources?

A: Ground water, which is stored in *aquifers* below the surface of the Earth, is one of the Nation's most important natural resources. Ground water is currently the source for almost 100 percent of the water used in neighborhoods in Southeast Texas. That will change in the years ahead, however, when some of our drinking water will come from surface water resources, such as a river, lake, or reservoir.



Q: Where does our household water come from?

A: Water is piped to most area homes by a municipal utility district (MUD), or by the city in which they live. In some cases, families obtain their drinking water from their own private water well.

Q: How is water delivered to our homes?

A: Many years ago when everyone lived in rural areas, they would have to get their own water from rivers or from local wells. Today, since most people in the U.S. live in towns and cities, and communities, we rely on an organized system of pipelines, water pumping stations, and water tanks and water towers to deliver our drinking water.

Q: How much water does the average person use at home per day?

A: Estimates vary, but usage may range from about 80-100 gallons of water to as much as 220 gallons per day. The largest use of household water is in the bathroom -- to flush the toilet, and for showers and baths. That is why, in these days of water conservation, individuals are going to be asked to use less water. If we are all willing to save a little, we will all save a lot!



Q: Does a little leak in my house really waste water?

A: It's not the little leak that wastes water -- it is the little leak that keeps on leaking that wastes water. And the fact is that little leaks often get ignored-- and continue to leak again another day. So, how can a little leak turn into a big waste? Many of our toilets have a constant leak -- somewhere around 22 gallons per day. This translates into about 8,000 gallons per year of wasted water -- water that could be saved. Or what if you have a leaky water line coming into your house. If it leaks 1 gallon of water every 10 minutes that means that you are losing (and paying for)

144 gallons per day, or 52,560 gallons per year.



Q: How does our swimming pool stay so clean?

A: It is not an easy task to keep a swimming pool so clear and clean. If you just set a pan of water outdoors during the hot summer, you'll see that it ends up containing gunk very quickly. Swimming pool water is continuously pumped through a filter to trap particles, like all those bugs that fall in. To keep algae and dangerous bacteria from growing, chemicals such as chlorine are added. Chlorine is also added to your drinking water to keep those bacteria out of your stomach.

Q: How many baths could I get from a good rainstorm?

A: Let's imagine that your house sits on a one-half acre lot. And let's say you get a storm that drops 1 inch of rain -- that amounts to about 13,577 gallons of water on your yard. A big bath holds about 50 gallons of water, so if you could save that inch of water that fell you could take a daily bath for 271 days!



Source: USGS Water Science for Schools

Give **COMPOSTING** a try... and help conserve water, too!



Hey! Spring is here and homeowners are feeling the call to spruce up their yards and gardens. Unfortunately, sprinklers are beginning to work over time...in hopes of greening up those ever-thirsty St. Augustine lawns. Far too many folks don't realize that over-watering can actually damage landscapes by preventing air from reaching the roots.

How Much Water Is Enough?

Maintaining proper soil moisture is critical. After being dormant during winter months, its time to initiate an appropriate care schedule that is key to an attractive and healthy lawn. Appropriate fertilization will help produce a dense turf that resists weeds. **Be sure to keep fertilizer off of paved areas and always water it in to avoid pollution of waterways.** Don't fertilize if rain is imminent, and don't over-fertilize. That causes the leaves to grow much faster than the roots. The grass will then require more water and more frequent mowing and attract more pests.

Consider A Composting Program...

Composting is one of the most productive things you can do for your yard and garden. Take advantage of all the last remaining leaves and pine straw and "cook up" a batch of mulch that will give your flower beds and landscape areas a real boost. It isn't difficult and the payoff can be spectacular.

Not only is it great for your plants and landscaping, but composting also helps with one of the nation's most critical environmental problems. The U.S. Environmental Protection Agency estimates that

grass clippings, leaves, and tree or shrub prunings account for almost 20 percent of "household trash" and perhaps as much as 50 percent in Summer and Fall months. Landfill sites are rapidly filling up, and yard debris is a significant part of the problem.

In addition to helping with the landfill crisis, composting offers another, very practical benefit. When rich compost mulch is used in flower beds and landscape areas, it holds in the moisture and **cuts down on the amount of water needed to keep the plants healthy.** Compost also breaks up clay soils, serving as a safeguard against erosion. And it adds structure and moisture to sandy soils, which can allow landscaping of otherwise undesirable planting areas.

Composting is a science... involving a complex "food chain" of bacteria, fungi, worms, beetles, mites and lots of other beneficial organisms that "eat up" organic materials and produce humus. Bacteria carry the heavy load in composting, especially in "hot" compost when they populate quickly. All these "bugs" need is a mass of organic materials that contain a balanced diet of nutrients -- carbon and nitrogen -- along with adequate moisture and oxygen. Mix plenty of "green" materials (food scraps, grass clippings, and manure) with high carbon "brown" materials (dry pine straw, hay, dead leaves, wood chips or shavings, broken up twigs) and you're on the way. A downloadable online publication of the Texas Commission on Environmental Quality -- "A Green Guide to Lawn Care" -- provides a wealth of information on composting (see the Useful Links box for the URL).

Compost improves soil aeration, which enables vital oxygen to boost soil productivity. Finally, virtually all plants grown in compost-enriched soils are healthier and are better prepared to fight off assaults from insects and diseases. So, with all these benefits and with the cost of water going up, composting can save both water and money!



Useful Links...

www.waterwisetexas.org
<http://aggiehorticulture.tamu.edu>
[http://www.tceq.state.tx.us/
comm_exec/forms_pubs/
pubs/gi/gi-028.html](http://www.tceq.state.tx.us/comm_exec/forms_pubs/pubs/gi/gi-028.html)

Be careful about what you throw away... Greasy food scraps can come back to haunt you!



For a lot of families, the kitchen just seems to be the favorite place to gather.. especially when tempting aromas beckon and there are lots of tasty tidbits to sample. When the scrumptious meals are over, however, everything from breakfast scraps to the more bulky “feast” leftovers get scraped into the disposal in the kitchen sink. It is not quite so appetizing to think of all those shredded greasy food scraps sliding down the drain where, once they begin to accumulate in the pipes, some serious blockage can occur.

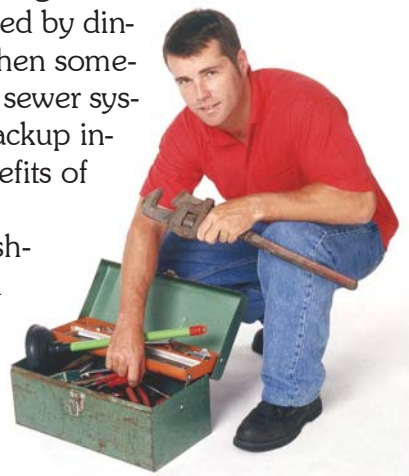
Some foods and cooking ingredients are potentially more troublesome than others. Discarded substances like cooking oil, bacon grease, mayonnaise, poultry skin, and pasta can stagnate in underground plumbing lines and get even messier when joined by dinner roll scraps, gravy and mashed potatoes. Then some time later, when the meal is long forgotten, the sewer system becomes blocked sufficiently to cause a backup inside the house and the plumber reaps the benefits of

costly remedies and repairs.

While most homeowners may not be aware that commercial establishments and restaurants are required to install “grease traps” or interceptors and have them cleaned regularly, there are no such requirements for private homes. It is up to the homeowner to make sure that their pipes aren’t clogged up with discarded food.

According to the Texas Commission on Environmental Quality (TCEQ), most sewer backups occur between the house and the main sewer lines. This means that it is the resident’s responsibility to correct the problem. In even more complicated situations, grease blockages in the main lines can cause chain events --sanitary sewer overflows lead to pollution of nearby lakes and streams which create potential health threats for people and wildlife.

Disposal of cooking grease into storm drains has the potential to cause more havoc. The storm drains lead directly to streams and creeks, so *discarded grease can also pollute the nearest water source*. Remember, any substance poured onto the ground can end up in groundwater. Take the time to dispose of greasy substances properly...recycle as much as possible and pour cooking oils, lards, and grease into closeable containers for disposal. Or consider mixing with dry kitty litter until the oil is absorbed and then place in a zipped top bag for disposal.



Here are some additional tips for the disposal of grease and leftovers from TCEQ...

- Place grease and used cooking oils in covered collection containers. Let them solidify on the counter or in the refrigerator before placing them in the garbage.
- Scrape food scraps into trash cans or garbage bags; minimize the use of the disposal. Non-meat and dairy food items may be placed in a compost pile.
- Remove oil or grease from dishes, pans and griddles by using a rubber spatula or paper towel to absorb it instead of rinsing it down the sink.
- Prewash greasy dishes and pans with cold water -- not hot -- before going into the dishwasher.
- Do NOT pour cooking oil and grease down the drain...ever.
- Overall, be careful what you scrape into the disposal. Once the walls of the pipes begin to clog up, all kinds of discarded scraps can exacerbate the problem.
- Don’t run hot water over dishes, pans, fryers or griddles to wash oil and grease down the drain. 💧



From the Tap...



Would you use as much water if it were this hard to get?

WATER...something we all take for granted. When we turn on the faucet, it's there. It works for us every day...in the kitchen, the bathroom, the laundry room, and for our lawns and gardens.

And let's not forget that we probably "eat" more water than we "drink"-- huge amounts of water are used to grow crops and livestock in Texas. According to the Texas Water Development Board (TWDB), livestock water demand in Texas is projected to **increase by 27 percent** by 2050.

Although our state is only the second-most-populous in the US, it is the largest generator and consumer of electricity. Demand for water for steam-electric power generation is expected to **increase by 86 percent** by 2050.

Let's face it...we use large quantities of water today, and we'll need even more in the future. If Texas does not implement plans to ensure that there is enough water, we could lose almost 2 million jobs in 2010, and 7.5 million jobs by 2050.

There's a lot at stake here... certainly our quality of life depends on adequate water supplies. **It's up to us to learn to use our water wisely...**

Want more info on composting?

Please visit
HoustonWaterGarden.com

Please mail water payments to:
HCWCID 132
P.O. Box 692170
Houston, Texas
77269-2170

Office Address:
17451 Village Green
Houston, Texas 77040

All phone calls -- including billing questions, to set up or disconnect service, emergencies or any other inquiry:

832-467-1599
fax 832-467-1610

If you should have water or sewer-related problems, call our water district operator **BEFORE** calling a plumber or other private service. We will investigate the problem at no cost to you. If it is a water district-related problem, we will arrange to correct it as quickly as possible. If it is **NOT** a water district problem, we will provide our advice.

Remember, call us first!
We are here to help you!

HARRIS COUNTY WCID 132



www.hcwcid132.com

EARTH DAY IN THE GARDEN
Saturday, April 28, 2007
10 am to 3 pm
Bring the whole family!

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