WATER CONSERVATION IN YOUR HOME

Kingsbridge M.U.D. Newsletter
SPRING | 2013

5 EASY STEPS OF WATER CONSERVATION

Blueline

LAWN IRRIGATION
WATERSENSE
HIGH EFFICIENCY APPLIANCES
GREY WATER UTILIZATION

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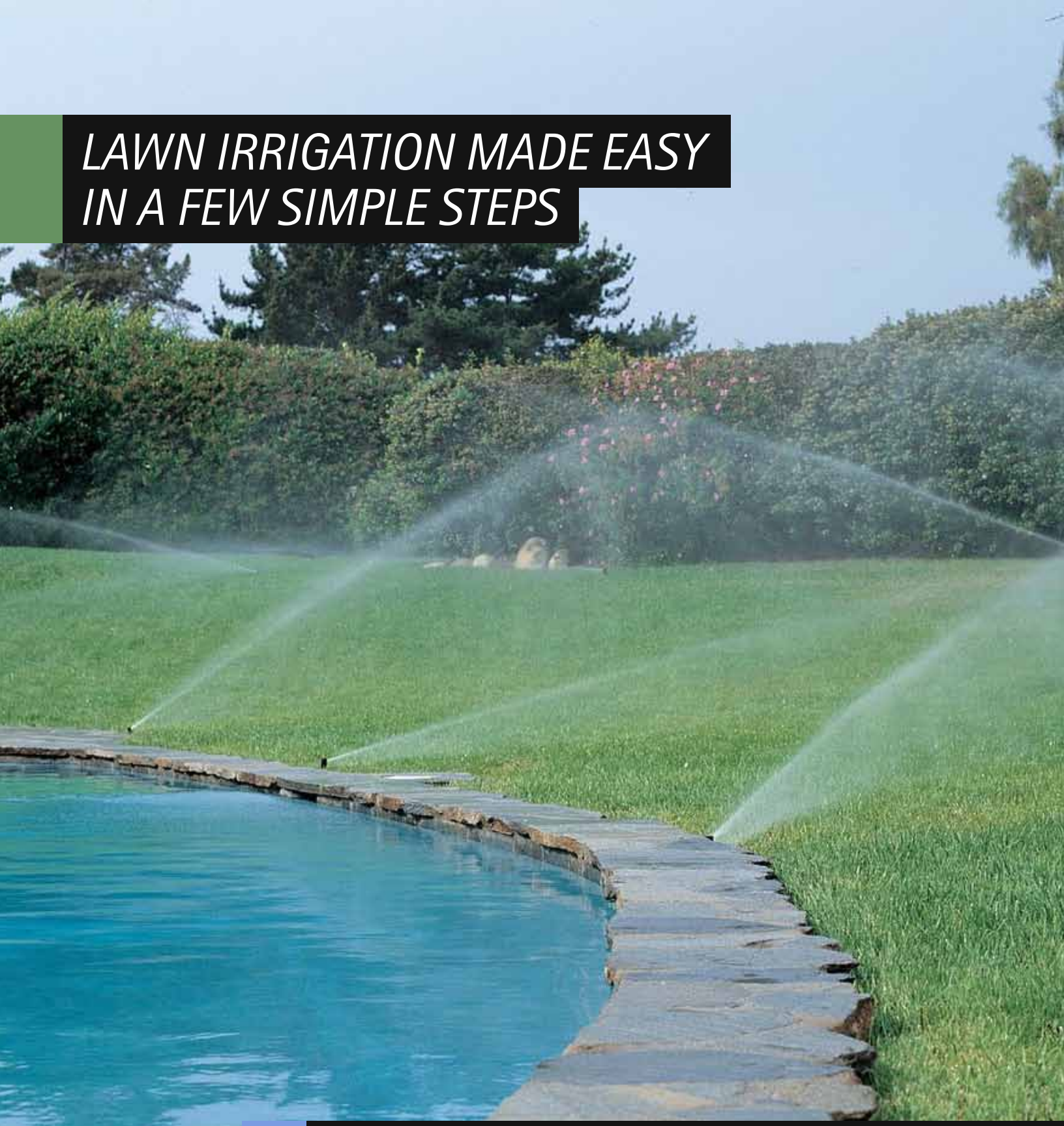
LAWN IRRIGATION MADE EASY IN A FEW SIMPLE STEPS



Did you Know?

If you have automatic sprinklers and have them set to run at night (which is preferred), occasionally turn them on manually during the day so that you can watch the coverage pattern. This will allow you to determine if too much water is going into the street or if a sprinkler head is damaged.
In rainy periods, please turn your sprinklers off.

INCREASE IN POPULATION AND CONSERVATION

Population Growth

The Association of Water Board Directors met recently, with an astounding projection.

In the next 30-50 years there will be a rise in population in Houston and its surrounding areas bringing the total to 11 million people. We look at the projected growth of the population against our supply of water. While the population continues to rise, our water supply does not. An increase in conservation is severely needed. There are many ways to conserve that are easy and ultimately cost effective.

Lawn/Garden Irrigation

The largest waste of water that can be seen every day is from lawn irrigation. How many times have you seen someone irrigating their lawn while it is raining or in the mid-day heat? When you are irrigating your lawn it is very important to look at key factors: Are my sprinklers pointed in a manner that best suites my lawn and/or garden? Am I irrigating my lawn and/or garden at the best time? How many times a week is my lawn and/or garden being irrigated? Lastly, how long am I irrigating my lawn and/or garden?

The easiest solution is to purchase an automatic irrigation system which can be set for specific days a week, times, and duration. The optimum run time for any automatic irrigation system is between 2-3 am. That time range allows the water to be absorbed into the ground and get into the actual root systems, where the water is needed most.

When irrigating your lawn and/or garden between 2-3 am, the irrigation should not run any longer than 20 minutes. Any more and it becomes over-saturation. Over-saturation may also occur based on how many times you are irrigating the lawn each week. Anything beyond 3 days a week also begins to over-saturate your lawn. When a lawn becomes over-saturated the water is not absorbed into the ground, instead the water is simply evaporated or in extreme cases of over-saturation you may begin to kill the lawn and/or garden you are trying so hard to preserve.

The final and most important circumstance that seems to pop up is where the sprinkler heads are aiming and what exactly is being irrigated. Many times the heads may be pointing at the sidewalk, street, or driveway. Those areas do not need to be irrigated and are thus a net loss of water across the district.

Toilet

Toilets are another big loss of water that can be stopped by simple home maintenance. Repair running toilets, avoid running unnecessary water, and replace inefficient appliances.

Toilets are, by far, the main source of water use in the home, accounting for nearly 30 percent of indoor water consumption. Toilets account for a major source of wasted water due to leaks, inefficiency, or both.

In 1992 the Energy Policy Act was passed which mandated water efficient toilets among other things. If you have toilets in your house manufactured before 1992 you may look into replacing them with WaterSense (an Environmental Protection Agency program whose label on consumer products signifies water efficiency) labeled toilets that alone can save a family of four, on average, $2000 in water bills over the lifetime of the toilets.

Composting toilets are another option, they require little to no water and uses open air processing to manage waste. Composting toilets have been an established technology for more than 30 years. The composting toilet system can provide an answer to sanitation and environmental problems.

Faucets

Water faucets and showerheads account for 32 percent of indoor water, a combined 2.2 trillion gallons of water consumed each year across the United States. Whether you are in the market for a new sink or just replacing an old one, a WaterSense labeled sink and accessories are a conservative choice.

WaterSense labeled sinks reduce the water flow by 30 percent or more with negligible loss in operating performance.

If every household in the United States installed WaterSense sink faucets or faucet accessories it would save $350 million or more in water utility bills and 60 billion or more gallons of water annually. The water saved is enough to meet the public demand for the City of Houston for about 6 months. However, if you are not currently looking to replace your faucets and sinks, look into replacing the aerator. The aerator is the attachment on the tip of the faucet which determines the maximum flow rate. Aerators are an inexpensive replacement and very effective for water efficiency. Also by doing your best to be water conscious you can save vast amounts of water. Simply turning the water off while you are brushing your teeth or shaving is a good example.

Showers

Showering accounts for 17 percent of residential indoor water use in the United States totaling more than 1.2 trillion gallons of water consumed annually.

High efficiency shower fixtures are an easy and affordable option to achieve water savings of 25-60 percent. High efficiency shower fixtures can be found for $10-$20.

The average washing machine uses about 40 gallons of water per load.

When selecting a high efficiency showerhead you are looking for a flow rate less than 2.5 gpm (gallons per minute) for maximum efficiency. Before 1992, some showerheads had flow rates of 5.5 gpm or more. We strongly suggest you replace older models if you're unsure of the flow rate.

Appliances

If all U.S. households had water efficient appliances, the United States would save more than 3 trillion gallons of water and more than $18 billion dollars annually.

The average washing machine uses about 40 gallons of water per load, which puts the washing machine at number two on the household water use list. When you are purchasing or replacing washing machines and dishwashers look for water-saving Energy Star models to reduce consumption of water and energy by 35-50 percent.

Grey Water Utilization

Utilizing grey water, (domestic waste-water produced excluding sewage) could allow us to produce and supplement our districts water supply. Utilization of grey water is beneficial for a multitude of reasons.

First and foremost, the utilization of grey water reduces the need for fresh water preserving our allotted water supply, as well as significantly reducing household water bills. Secondly, the amount of wastewater entering sewers or on-site treatment systems is greatly reduced benefitting the individual household as well as the broader community.

With proper treatment, grey water could be put to good use including water for laundry and toilet flushing, as well as irrigation of plants. Treated grey water can be used to irrigate both food and

Preventing floods

The primary purpose of the storm sewer system is to prevent flooding. However, if the storm sewer system is full of leaves, grass clippings, and other kinds of waste, then it cannot efficiently drain the streets.

It would be impossible to keep all leaves and grass clippings out of the storm sewers. However, residents can do their part to help keep the storm sewers free of yard waste:

- Be sure to sweep or blow any leaves or grass clippings back into your yard when doing lawn care.
- If you have a lawn care contractor, make sure they remove any leaves or grass clippings from the street when they service your lawn.

Also, please remember that dumping hazardous waste into storm sewers can be a violation of Federal Environmental Protections Agency regulations.

non-food producing plants. The nutrients in the grey water such as phosphorus and nitrogen provide an excellent food source for these plants.

Lastly, utilizing grey water does not diminish our quality of life, and can give so much back on a multitude of levels.

Five Easy Steps to Water Conservation

The potable water supply on this Earth is finite. With that being said, we have many tools we can use to extend and replenish the life of our water supply. It is our responsibility just as much as the next generation's to do everything that we can to conserve; not just for yourself, but for your children as well. We at Kingsbridge MUD are simply requesting you be mindful of the water you are using and where it is going, for that alone could save countless gallons across the district.

The five easy steps of water conservation:

1 **Irrigation system**
Have your system inspected to ensure it is operating correctly, identify any problems and set it to run more efficiently.

2 **Dishwasher and washing machine**
Only run the dishwasher or washing machine with a full load. If it is time to replace either of these appliances, do so with a water conserving high efficiency model.

3 **Faucet moderation**
Turn the water off when you are brushing your teeth, or shaving your face. This is such a simple step and can save up to 8 gallons of water per day; almost 3,000 gallons of water per year!

American Tap Water Facts

Only around 1% of the Earth's water is fresh water available for humans to drink (97% of the Earth's water is salt water, 2% is frozen).

- *The U.S. has fresh water resources totaling about 660 trillion gallons. Americans tap into about 341 billion gallons daily.*
- *Water utilities monitor for more than 100 contaminants on a regular basis.*
- *More than 94% of American water utilities are in full compliance with health-based federal regulations annually.*

www.awwa.org

4 Install low flow parts

Intall faucet aerators and low flow showerheads. These water saving devices are cheap, easy, and extremely effective.

5 Install a high efficiency toilet

Toilets account for nearly 30% of water used in the home. An efficient solution is WaterSense labeled toilets. If you are currently not in the market for a new toilet, you may still join in the water conservation fun by adding one or two toilet bricks into each of your toilets; "Toilet bricks" refer to bricks placed in the water tank of a toilet. The bricks displace unneeded water in the tank ensuring that each flush uses less water.

Frequently Asked Questions

We would like to help you become more knowledgeable about your MUD; these are a few of our frequently asked questions.

Where does our water come from?

Our drinking water comes from groundwater and surface water sources. The groundwater comes from the Evangeline aquifer and our surface water comes from the North Fort Bend Water Authority primarily utilizing Lake Houston.

How safe is our tap water?

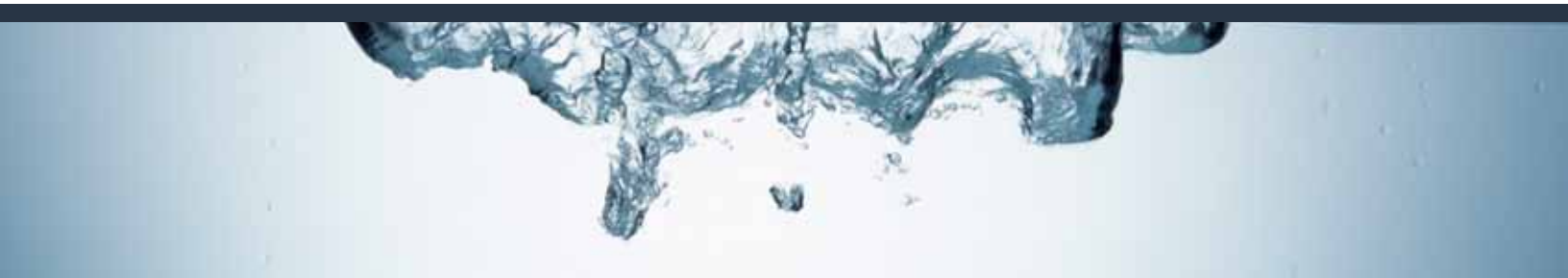
The U.S. Environmental Protection Agency (EPA) establishes regulations to ensure the water coming through your tap is safe to drink. However, all water (tap or bottled) has some contaminates present. These contaminates can be microbial, inorganic, pesticides and herbicides, organic chemical, or in some cases radioactive. Despite the presence of minimal contaminants, we ensure the water brought to your homes is readily safe to drink, and meets or exceeds EPA standards.

Is bottled water better than the tap water I have in my house?

That is somewhat a matter of opinion; bottled water is regulated by the U.S Food and Drug Administration (FDA) due the fact that it is a packaged food product. The water distributed to your homes is regulated by the U.S. Environmental Protection Agency (EPA). The regulations placed on the quality of the water by the EPA are stricter than that of the FDA as far as microbiological contaminates are concerned. Furthermore the EPA mandates consumer reports be made public for municipal water companies, while the FDA does not force the bottled water companies to make their testing public. With municipal water, the consumer gets a report proving the water is safe, but bottled water does not.

How may I contact Kingsbridge MUD if I have questions or concerns?

The Board of Directors of the District holds a meeting at 6:30 PM on the second Thursday of each month at 9114 Woodleigh, Houston, Texas 77083. We encourage anyone residing in the district to attend. We may also be contacted via our website, www.kingsbridgemud.com.



DISTRICT CONTACT

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