

FALL 2007

# WATER Works!

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

**Harris County Water  
Control and Improvement  
District 132**

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## **A Message from the Board of Directors...**

**WATER...**a precious natural resource that all living things need to survive. It is something that we have all taken for granted...when we turn on the faucet, start the washing machine or flush the toilet we expect it to be there, ready to work for us. Unfortunately, the days of cheap and plentiful water in Texas are rapidly drawing to a close.

We have relied on our aquifers to supply an increasing amount of water and they have begun to decline. In 2000, the Harris-Galveston Subsidence District mandated that we reduce our reliance on groundwater by making a phased conversion to surface water -- water from our lakes, rivers and streams -- and that process is now underway.

There is some pretty strong evidence that accomplishing this conversion will help. The Evangeline Aquifer -- from which we get a significant amount of our groundwater -- recorded a 100 foot decline over a recent 20 year period. Reducing the amount of groundwater pumped from an aquifer can make a significant difference. In fact, in other areas in southeast Texas -- where a similar conversion was mandated -- the aquifers have begun to recharge, and the same is expected to occur in our area, as well.

The first target conversion date is 2010, when we will reduce our groundwater consumption by 30 percent. Our District is within the boundaries of the North Harris County Regional Water Authority and we are cooperating with that agency to collectively accomplish the conversion goals. In 2020, areas within the Authority may rely on groundwater for only 30 percent of our water needs...and in 2030 only 20 percent of the total amount of water in our area can come from groundwater.

With the depletion of critical aquifers, groundwater resources that we have relied on for decades may be insufficient to meet future needs. Surface water, which is renewable, will help meet the increasing demand, but much of the state's supply is not always readily accessible and is costly to deliver to population centers where it is needed.

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## Board Message...

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During the past three years, the North Harris County Regional Water Authority has installed more than 29 miles of new water lines throughout our community that will deliver surface water to our neighborhoods for the first time in 2010. Currently, these lines are used to 'share' groundwater among districts that have problems with either water quality or do not have sufficient quantity of water to serve the needs of their customers.

With surface water conversion just over the horizon, it doesn't make sense to drill more groundwater wells, so this Groundwater Transfer Program is especially cost-effective. Another benefit is that while the water lines currently being installed will also be used for surface water in the years ahead, they have been constructed with today's dollars...a significant savings to everyone within the Authority.

### CONSERVATION COUNTS

Another important thing to remember is that water is too important to waste, and it is up to each of us to use it wisely. As your water provider, we are actively encouraging our neighbors and customers to be aware of how

much water they use -- inside the home and for yards and gardens -- and to eliminate leaks and unnecessary use whenever possible. Watch your water bills for some very user-friendly ways to accomplish this!



*These 3-stage compost bins are located at the District's Water Conservation Garden. Boy Scout volunteers 'tend' the mixture and will sell the product as a fundraiser for their troop. More information is available on the District's websites.*

The District is also promoting other methods to use water more efficiently. We have a demonstration COMPOSTING project at our site, and have information on our website that details how to construct compost bins at home. Many are surprised to learn that with compost used in landscape areas, plants are able to thrive with 50 percent less water than might usually be applied. The compost enriches the soil and allows it to hold moisture longer. (See page 7 to learn about our Scout partner-

ship compost project.)

### CHANGES AHEAD...

It bears repeating that the days of cheap and plentiful water are behind us. In the future, water conservation and water reuse projects will become increasingly important, not just in our community, but across the state. Water issues are receiving more attention with each legislative session in Austin -- a trend that will only escalate in the years ahead.

In case you're not already a regular visitor, we'd like to introduce you to our website -- **[www.hcwid132.com](http://www.hcwid132.com)**. We post meeting notices there and include information about the District's operations. And, if you'll sign up on the home page, we'll send you e-notices about key topics.

You'll also find a very important section on water conservation, with information on how you can save water and money by implementing some simple, common sense things around your home. We will continue to add activities for youngsters in our publications and online so that they can learn good water 'stewardship' practices, too. Please use the "contact us" section of our website to communicate with us or to ask questions...we want to hear from you. 💧



# Children Aren't Waterproof...

There is nothing quite like a refreshing dip in a swimming pool to really enjoy a hot Texas day. Swimming is an excellent form of exercise for people of all ages. Unfortunately, children under the age of five are 14 times more likely to be involved in a fatal accident in a swimming pool than in an automobile.

Hot weather is around a long time in Texas -- and recreation usually involves water activities of one kind or another, so one of the first things parents are concerned about is helping their children learn to respect the water... whether they are in it, on it, or just around it.

Basic water safety should be learned by people of all ages, because simply learning to swim is no guarantee that you will never be involved in an aquatic accident.

American Red Cross statistics indicate that 50 percent of pool accidents involving young children could be prevented by adequate fencing and barriers. Local laws and regulations call for all outdoor pools -- public and private -- to be enclosed by a fence at least four feet high, and specify that they must have self-closing, self-latching devices to keep out adventuresome youngsters.

The vast majority of people who drown **never intended to get in the water in the first place**. Most were dressed for activities near the water, but not in it. They might have been in a boat, on a pier or dock, or playing on the deck of a swimming pool when an accident occurred. Drownings are often called "silent" accidents, because they usually happen quickly, without a cry for help.

Experts insist that no one -- of any age -- should EVER swim alone. It only takes a minute for a serious accident to occur, so parents should never take their eyes off children around the water...not even for a second.

Youngsters are naturally curious about a sparkling body of water -- anything from a giant puddle to a mighty ocean will do -- and this attraction often stays with us for life. A sliding glass door that successfully separates a child from a backyard pool one day... can be opened by young fingers



the next. Never take barriers for granted; constantly check to see that they are secure and prevent unwanted access to a pool area.

Sadly, the Consumer Product Safety Commission predicts that this summer alone, more than 300 children under the age of five will drown in home swimming pools. While thousands more will be rescued in time to prevent drowning, many will suffer serious and permanent brain damage.

Minimize the risk that you or someone you love will be involved in an aquatic accident by following some simple, common-sense rules, and make your backyard pool safer for everyone who uses it.



◆ Make sure children learn how to float on their back and how to reach the side if they should ever fall into a pool. Teach them how critical it is to **YELL FOR HELP** immediately!

◆ Make sure your pool or spa is inaccessible to unsupervised children. Be sure there are no footholds or handholds in any fence or barrier that will allow a child to climb over.

◆ Doors to pool areas should be locked and protected with audible alarms and out-of-reach locks.

◆ Keep rescue equipment and a telephone nearby whenever the pool is in use.

◆ Flotation devices will not keep a child safe in the water; don't rely on them.

◆ Insist that all who use the pool follow some strict rules: No running; no pushing others under water; no diving except in designated areas with adult permission and supervision.

◆ Anyone who supervises youngsters around water should learn CPR and be able to administer it at once. Seconds count in preventing death or brain injury -- which can occur in two to six minutes after oxygen is cut off from the brain.

◆ Diving into the shallow end of a pool can result in a paralyzing spinal injury. Simply do not allow diving from the side of the diving board, slide or other pool equipment, or diving through an inner tube or other pool toy. ◆



# Rain Sensors...A practical and cost-effective way to regulate your irrigation system!

With automatic timers on most underground sprinkler systems, it is easy to forget to turn off those systems during rainstorms or extended periods of rainy weather.

However, all too often sprinkler systems are running full force while it is raining. Water is wasted and lawns are over-watered.

Officials with municipal and county water agencies often say over-watering is the most frequent mistake homeowners make in lawn care.

Too much water promotes a shallow root system, which causes grass and plants to become vulnerable to hot/dry weather.

The demand for water in Texas is increasing. In an effort to help conserve that precious natural resource - also known as "blue gold" - residents and business owners charged with taking care of landscaping are urged to install rain sensors, or rain shut-off devices, on automatic sprinkler systems.

Sensors detect moisture/rainfall and automatically shut off when the trigger amount is met. They are important because they save water, and in turn, can save

dollars and cents on water bills. That cost savings could be substantial during a wet year.

## **What is a rain sensor?**

A rain sensor is a small device wired to the common line on an automatic sprinkler system and is designed to override the automatic watering cycle when a certain level of rainfall is detected. The shut-off level is usually set at 1/4-inch of rain.

Rain sensors do not affect the sprinkler system's overall timing device. Once the collection dish dries out, the automatic timer kicks in.

The three primary benefits of installing a rain sensor are:

- Cost savings - the sprinkler system shuts off when adequate rainfall is received, thus saving money on water bills.

- System savings - there is less wear and tear on the sprinkler system because it only runs when necessary.

- Lawn protection - reduces potential damage to the lawn caused by over-watering.

## **The problem with over-watering**

Lawns irrigated three or four times a week, or everyday,

cause grasses and plants to develop shallow root systems that cannot survive without frequent watering. During drought conditions, or in hot weather, these "addicted" plants and grasses wilt quickly. And, if grass is cut to a height of one or two inches, the problem is compounded because the top few inches of soil dries out quickly in hot weather, and plants and grasses are further starved for water.

## **The solution**

The easiest way to correct the problem caused by over-watering is to gradually reduce the frequency of watering. With less frequent watering, root systems push deeper into the soil looking for water. Soon, grass and plants will be able to survive with less frequent sprinkling sessions. The recommended watering cycle is two periods of irrigation per week - about 1/2-inch of water per period - which usually takes about 15 minutes.

Manual systems take longer to deliver the 1/2-inch of water required. One suggestion is to place a few short empty cans - tuna fish cans do the trick - on the lawn and time how long it takes to reach the 1/2-inch mark. ■

# RECYCLING: IT DOESN'T WORK WITHOUT YOU

We've all heard about recycling. We know it's a smart idea. But are we participating enough to have a significant impact on reducing manufacturing pollutants and saving energy?

Successful recycling, in the simplest terms, is a loop -- one that begins and ends with you. When we don't participate in recycling programs unnecessary waste is added to our landfills, and landfills are not designed to decompose trash -- only to bury it. Constantly adding to our landfills means we constantly need more of them. Because no one wants one near their home, trash will need to be hauled greater distances...and that means increased garbage collection costs. It doesn't have to be that way.

## What can be recycled?

■ **Paper Products:** includes newspaper, white copy paper, green/white ledger paper, manila file folders, cardboard, magazines, catalogs, telephone books, books and junk mail. **Fact:** Each ton of recycled paper can save 17 trees, 380 gallons of oil, three cubic yards of landfill space, 4000 kilowatts of energy and 7000 gallons of water. It's extremely important to remember to recycle as many forms of paper as possible. Cans, plastics and glasses are each less than 10% of household waste. We throw away four times that much paper.

■ **Plastics:** did you ever notice the number on the bottom of plastic bottles? That number signifies what type of plastic was used to make it, and indicates if it is recyclable. The most common numbers are #1 -- PET plastic (milk jugs, detergent bottles); #2 -- HDPE plastic (food packaging, soda bottles) and film plastic (LDPE plastic) used in grocery bags or shrink wrap.

■ **Metals and Cans :** includes aluminum, tin/steel and scrap metals.

■ **Automotive Oil, etc.:** includes cooking oils (liquids only), motor oil and liquid auto lubricants, oil filters, antifreeze, all re-chargeable batteries and printer and ink cartridges.

■ **Glass Containers:** includes clear, brown and green bottles and all colors of commercial food and beverage containers. **Fact:** Glass containers (which can take 4,000 years or more to decompose) can be recycled forever without loss of quality.

■ **Tires, Electronics (computers, monitors, printers, etc.), Household Appliances:** please contact your nearest recycling center for specific instructions and applicable fees for these items.

## Household Hazardous Waste (HHW) Collection Program

Harris County holds periodic HHW Collection events throughout the community. Accepted HHW items include: paints and stains, paint thinners and strippers, household cleaners, household chemicals, fertilizers and lawn chemicals, aerosol products, pesticides and herbicides, pool chemicals, fluorescent light bulbs, gasoline and other flammable liquids and mercury (thermometers and thermostats). Visit <http://www.cleanwaterclearchoice.org/hhw/> for information about recycling events and locations.

## Does recycling really make a difference?

You better believe it. Consider this: We use over 80 BILLION aluminum soda cans every year, but because so many are recycled, aluminum cans account for less than 1% of the total U.S. waste stream (according to EPA estimates). Glass recycling saves more than a quarter of the energy used to make glass from raw materials, and manufacturers are catching on. Most bottles now contain at least 25% recycled glass.

These, and other encouraging results, give us hope that, together, we can positively impact the health of our world and community. Look for the recycled symbol on items you purchase. You CAN make a difference! ■



## Wind and Water...the Deadly Twins

Wind speeds don't tell the whole story when it comes to hurricanes and tropical storms. Hurricanes produce storm surges, tornadoes, and frequently the most destructive of all - inland flooding. Often, the greatest rainfall amounts occur from weaker storms that drift slowly or stall over an area. Flooding can be a major threat to communities hundreds of miles from coastal areas as heavy rains fall from these far-flung tropical air masses.

Case in point, in 2001, Tropical Storm Allison produced extraordinarily heavy rainfall and catastrophic floods in the Houston area. Allison continued to deliver heavy rainfall and flooding from Louisiana eastward to North Carolina, and then northward along the east coast. Forty-one deaths were directly attributable to the heavy rain, flooding, tornadoes, and surging surf. The Federal Emergency Management Agency (FEMA) reported damage estimates approaching \$5 billion, with approximately \$4.8 billion in the Houston metropolitan area alone.

Now that the current hurricane season is upon us (June through November), take a moment to plan ahead. Are you prepared if a major storm hits our area? Do you have flood insurance? Under FEMA's revised floodplain maps (effective 6-18-07) -- which are used to determine insurance rates -- you might live in a floodplain and not even realize it.

"What is a floodplain?" you may well ask. Many people are not familiar with this term, and haven't previously had a reason to be concerned about it. Unfortunately, Tropical Storm Allison

changed all that.

"Streams, large and small, occasionally overflow their banks. This inundated land is defined as a floodplain."



"I've heard references to area storms as producing 100-year floods, or like Tropical Storm Allison, a 500-year flood. Do such floods only happen once in 100 years...or once in 500 years?"

"Being natural events, floods are described by their 'anticipated' rate of recurrence. Experts describe a flood's magnitude by its likelihood of happening in any single year (i.e., a 100-year flood would have a 1% chance of being equaled or exceeded in a given year at a given location). But remember, a 100-year flood doesn't simply occur every hundred years. It has a 1% chance of occurring every year."

"What if I don't live in a floodplain?"

"Your home is still at risk due to ponding and overland sheet flow. Our storm sewers are designed for normal rainfall events. When really severe storms occur, these systems can get overloaded. And since we live in flat country with high average rainfall, the risk of flood damage exists regardless of our home's location. Think about it...everyone really needs flood insurance. Don't put it off...call your agent today." ■

### Important Tips from the National Hurricane Center

- When you hear "hurricane," think inland flooding.
- Determine whether you live in a potential flood zone.
- If advised to evacuate, do so immediately.
- Keep abreast of road conditions through the news media.
- Move to a safe area before access is cut off by flood water.
- Don't cross flowing water. You might lose control of your vehicle.
- Develop a flood emergency action plan.
- Flood damage is not usually covered by homeowners insurance.

**The National Flood Insurance Program makes federally backed flood insurance available to residents and business owners. Call 1-888-CALL-FLOOD ext. 445, TDD# 1-800-427-5593.**

### Hurricane Essentials:

- Portable, battery-powered radio
- Flashlight & batteries
- First-aid kit w/manual
- Bottled water & assorted beverages
- Nonperishable foods, pull-top canned foods, packaged snacks
- Manual can opener
- Credit cards & cash
- Personal ID, maps, & emergency phone numbers
- Paper plates, paper towels, & prescriptions
- Baby needs: Disposable diapers & formula.
- Matches, pet supplies, & masking tape.

# Where does our water come from...and where does it go?

If you have ever wondered about these questions -- or if you have a youngster who has challenged you for answers -- a visit to our website will provide some help in formulating a response!

Recently, the young Klein ISD student, **Ryan Roszko**, who 'stars' in our "Kid to Kid" water conservation information series, met with district operator, **Michael J. Ammel**, President of EDP, for a personal tour of the District's water and wastewater treatment plants -- with a videographer along to record their conversation.

"Water is something we all take for granted everytime we turn on the faucet or flush the toilet," explained Ryan. "We don't think too much about it. How does the District keep up when there's increased demand for water? And

what will happen in the future when we begin the conversion to surface water? How do you meet our demand for water?"

These are some of the questions Ryan had for Mike Ammel as they went through the water plants. Mike discussed how a water well works, how water is stored and ultimately distributed to our homes. Then, climbing the tanks at the wastewater treatment plant, they had a bird's eye view of where water goes when it leaves our homes through the sewer system to be treated and returned to the environment.

"I really learned a lot from Mr. Ammel," Ryan said, "he explained the technical stuff in a way I could understand. Now I have a much greater appreciation for what goes on behind the scenes to make



Ryan Roszko (left) and Mike Ammel discuss 'where our water comes from...' in a new video.

sure the water is there when we need it."

The water plant tour videos -- along with Ryan's other interview segments -- may be seen on our website ([www.hcwcid132.com](http://www.hcwcid132.com)) and on the website of the North Harris County Regional Water Authority, [www.nhcrwa.com](http://www.nhcrwa.com). ■

## An Eagle in the Making



Cody and the District's consulting educator, Carol Fraser, check the status of the compost in the bins.

"Wow!" "Am I surprised!" "It doesn't even smell bad! How come?" ask members of Scout troop 87 as they visit Cody Watson's Eagle Scout project at WCID 132's Water Conservation Garden. Cody's response ("It depends on how much green material you mix with brown stuff and water that makes it

work") demonstrates his understanding of the process necessary to turn raw materials into compost. When added to flower beds, this marvelous substance reduces the water needed by plants and keeps these same materials out of the land-fills.

This Eagle Scout project, creating compost from sources mainly within WCID 132's area, is a hands-on experience for Cody. He's also collected unsold vegetables from the Kroger & HEB grocery chains; arranged for the Redd School to donate horse manure; and hauled in pine needles, cardboard, and leaves from neighbors into the mix. He used only water collected from two rain water barrels at the site -- one of which is fed by a gutter directing water off the roof of the compost structure and the other placed on a tower built by Cody for gravity flow -- to feed the bacteria, fungi, and

other organisms that are busy at work digesting the materials.

WCID 132 has made the composting project possible by providing a convenient location; the necessary facilities and equipment; and some all-important funding. The Board of Directors have made a commitment to demonstrating ways in which home owners can develop water conservation practices, and this project fits right in. An extra bonus from the compost project is that the scouts had the opportunity to earn their Surveying badges when the district's engineer, Mark Adam, president of AEI Engineering, Inc., agreed to work with the boys on surveying the MUD's property.

Serendipity is a wonderful thing -- especially when one good thing leads to another and great stuff like water conservation happens in the process! ■

# From the Tap...

## Are There Water Leaks at Your House?

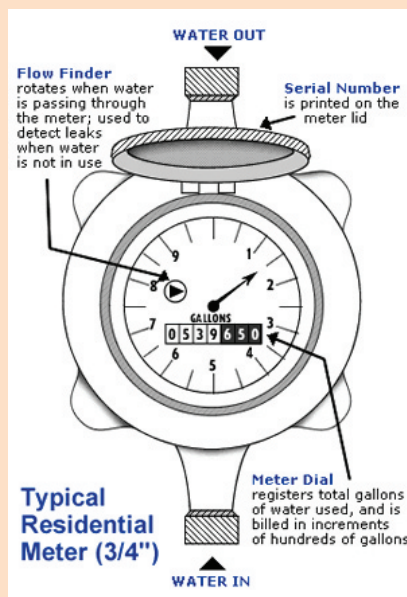
You have just received your water bill in the mail, but there's a nasty surprise inside....it is the highest bill you've ever had! Surely you couldn't have used that much water! "What could possibly be wrong," you ask.

Unfortunately, this scenario does happen to homeowners, but there is usually a simple explanation for a sudden increase in your water usage. Very often the culprit is a silent leak...sending valuable water and money right down the drain.

Here's a checklist to follow if you suspect a leak:

1. Turn off all water inside and outside your home.
2. Go outside to your meter box and open the cover.
3. Locate the black or red triangular-shaped Leak Detector on the left beside the numbers.
4. If the Leak Detector is not moving, you do not have a leak and no water is passing thru the meter.
5. If the Leak Detector is moving, you do have a leak and you should call a plumber. Water leaks on the homeowner's side of the meter are the homeowner's responsibility.
6. If there is water in the meter box, be sure it is not run-off water from sprinklers or rainfall before calling us. It saves the District and home-owner's money by checking this first before calling for service.
7. If you are certain it is a leak outside of your home, please call:

**832-467-1599.**



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](http://www.hcwcid132.com)

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