

WHY ARE MY RATES GOING UP
FLOOD PREPAREDNESS
XERISCAPING
HOME LEAD LEVELS
DOVER EXPANSION





North Fort Bend Water Authority: The NFBWA was created by the Texas Legislature in 2005 to act on behalf of the water districts within its boundaries and the city of Fulshear. The NFBWA was to develop a regional approach to addressing water supply issues and to negotiate for a long-term, alternative supply (other than groundwater) adequate enough to comply with the groundwater reduction mandate of the Subsidence District. This mandate requires that we reduce our reliance on groundwater at least 30 percent by 2014 and by 60 percent by 2025. Failure to meet these deadlines would trigger huge Subsidence District penalties which are currently set at \$6.50/1000 gallons.

You may have noticed your water bill has been increasing, but do you understand why? It is important to understand the circumstances surrounding the decisions being implemented by the North Fort Bend Water Authority. The transition from groundwater to surface water will ultimately be more efficient for our region's water consumption.

**Community Growth** Texas, and more specifically the Greater Houston area, has experienced a population boom. As a result there is a larger demand for water than original forecasts had predicted. It was previously estimated that the 2020 population in the Water Authority would be at 455,000 however that total was reached in 2010. Thus the area must increase its water conversion to keep pace with the rise in water demand.

**Water Delivery** NFBWA adopted increased fees on water usage that took effect January 1, 2016. The board of directors agreed to the new pumpage fee of \$2.75 per 1,000 gallons of groundwater pumped and a new surface water fee of \$3.10 per 1,000 gallons of water delivered by the Water Authority. Also included in this decision was an import fee that increases the current pumpage fee if the user is not connected to the Authority's water system.

**Bridging Partnerships** The Authority is working to acquire an easement for a new 96-inch "second source" cross-town pipeline that will bring surface water from Lake Houston to West Harris County. They are bridging partnerships with other water authorities in a concerted

effort to best meet the 2025 deadline. The Water Authority is also expected to acquire roughly 690 new easements and widen approximately 600 existing easements. In order to pay for the construction of new water lines throughout North Fort Bend County, the Harris-Galveston Subsidence District voted to delay the next conversion date from 2020 to 2025. This will afford residents a more gradual increase in rates overtime, while working towards a solution.

**Alternative Sources** Reducing groundwater pumping through conversion to surface water sources has had a positive impact on subsidence in the Houston, Galveston, and Fort Bend County areas. By sourcing from surface water

we've reduced chances of increased flooding and foundation problems often caused by excess groundwater pumping.

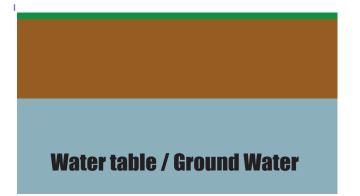
Kingsbridge MUD is required to pass along these rate increases from the North Fort Bend Water Authority to prevent increases in our tax rate. Unfortunately, rate increases from NFBWA are unavoidable and homeowners should do their best to conserve our invaluable water supplies as we learn to make better decisions about our limited resources. Residents are always encouraged to examine their water usage habits and practice conservation as we move forward in better utilizing our water sources and consumption.

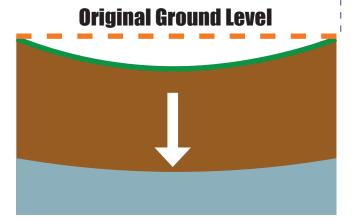
#### WHAT IS SUBSIDENCE?

Subsidence is the sinking of land resulting from groundwater extraction and a major problem in the developing world as cities swell without adequate regulation and enforcement. Excessive extraction of groundwater also has the long term effect of predisposing areas to flooding, even in locations previously not at risk.

#### **EFFECTS OF SUBSIDENCE**

- DAMAGE TO SURROUNDING BUILDINGS
- DAMAGE TO SEWERS, BRIDGES OR ROADS
- WELL CASING FAILURE
- FLOOD INSURANCE RATE FLUCTATION





# ARE YOU FLOOD PREPARED

ast year our region felt the significant and immediate impact that heavy thunderstorms can bring. As we saw flooding can happen quickly and without warning so it is imperative to have a flood plan in place before you are caught off guard and scrambling to respond to a serious situation.

Flash floods are the #1 cause of weather-related deaths in the U.S, but there are several basic steps you can put in place to prepare your home and your family.

Heading to higher ground is important but do not attempt to drive or walk across creeks or flooded roads (Turn around, don't drown!). If you are driving and are caught on a flooded road and waters are rising you should quickly get out of the car. On average, six inches of standing water can stall some cars, a foot of water can float a vehicle, and a car can be swept away by less than two feet of moving water. Flood waters can often erode roads and walkways so be cautious and aware even if floodwaters have receded.

If you have to evacuate make sure you take only essential items with you such as medical documents, medications, and other personal documents such as insurance policies and birth certificates. Keep these stored in a safe place that will be easy to access in the event of an emergency.

Other steps you can take before a flood strikes is to identify potential hazards in your home and know how to secure them. You should be prepared to turn off water and gas supplies in case you have to evacuate. As you prepare for the storm it is wise to secure structurally unstable building materials. Be sure to anchor all items that could easily be swept away and bring in outdoor possessions such as lawn furniture and grills. In an effort to reduce the risk of a possible fire or explosion, you should turn off your gas and electricity at the main switch or valve.

It is imperative to find out if your home is located in a flash-flood prone area. You can contact your local county planning department to determine this. You should familiarize yourself with your community's emergency plans, evacuations routes and know the locations of emergency shelters. You should also make sure your family has a plan for a flood evacuation and practice what to do. Do also inform your local authorities if you have anyone in your home that is elderly, bedridden or if anyone has special needs.

Hopefully you will never find yourself having to face rising floodwaters, but if you do having a plan in place will afford you valuable time and greater ease in responding to the crisis.

#### **FOOD & WATER**

- Water: one gallon of potable water per person per day for at least three days for drinking
- Food: at least a three-day supply of non-perishable food
- Manual can opener

#### **MATERIALS**

- Flashlight and extra batteries
- Plastic sheeting and duct tape to create a shelter-in-place
- Wrench or pliers to turn off utilities (Channel locks or crescent wrench)
- Printed Local maps:
   Cell phone GPS may
   not work
- At least \$100 in cash small bills, \$500 would be best (ATM & Credit Card Systems may be down)

#### **COMMUNICATIONS**

- ➤ Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both
- Whistle to signal for help
- Cell phone with chargers, car inverter or solar charger, and/or USB batteries
- Written contact numbers for family and friends outside of the area

#### **FIRST AID**

- First aid kit
- Necessary prescription or nonprescription medications
- Moist towelettes, garbage bags and plastic ties for personal sanitation
- Dust mask to help filter contaminated air



WATER STORAGE CONTAINERS ARE ESSENTIAL IN AN EMERGENCY.

PREPARE BY GETTING
HDPE AND BPA-FREE
CONTAINERS MADE
FROM THE HIGHESTGRADE PLASTIC AND
POLYETHYLENE.



## XERISCAPING HAS BEEN DESCRIBED AS ONE OF THE MOST CRUCIAL ELEMENTS OF WATER CONSERVATION, BUT WHAT EXACTLY IS IT AND WHY SHOULD YOU CARE?

It's important to understand the origins of the word and how it came into be applied in land-

scaping philosophy. Xeriscaping, pronounced "zeer-i-scape" was a term coined by the city of Denver's water department during a difficult drought period in the late 70's.

Xeriscaping: a landscaping and gardening methodology that reduces or eliminates the need for supplemental water from irriga-

tion. It is often used in regions that do not have access to plentiful or reliable sources of fresh water.

Texans are known for being loyal to their state, so why not extend that loyalty to your landscape? Native and adapted plants can tolerate even the harshest Texas weather meaning fewer replacements and less water consumed. The typical household water bill shows an average of 40 to 60 percent allocated to irrigation. Once established, native and adapted

plants require 80% less water as opposed to other plants. To help reduce the amount of water and money spent on your landscape consider converting to a Texas SmartScape yard. Whether you're in the market for a major landscape overhaul or just a few quick fixes to save water this summer, www.txsmartscape.com is an excellent resource with all the information you need. The searchable database lists SmartScapeapproved plants by color, shape, amount of sunlight or water needed. The landscape design tool will ensure the native plants are placed in an aesthetic manner.

#### **PLANT OPTIONS**



#### **TREES**

Plant trees in groups for improved shade for surrounding greenery. Common drought tolerant trees are scotch pine, sumac and juniper.



Shrubs should be planted close to their similar species. Planted in uniform rows or lines, tall shrubs can provide privacy and usually don't require much extra water.





Xeriscaping doesn't require you to sacrifice color. The coneflower, asclepias, sage and sunflowers are colorful flowering plants that are also drought-tolerant.

#### **SUCCULENTS**



Succulents are able to store water in their leaves, stems, and even roots, allowing them to survive for long periods in dry areas. The wide variety of shapes and colors of succulents makes them a great choice for many lawns. Common succulents include cacti, agave, yucca, sedum, aloe vera, and jade.





Portions of this article have been adapted from Wikipedia.

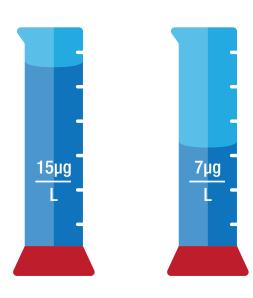
THE TYPICAL HOUSEHOLD WATER BILL SHOWS AN AVERAGE OF **40 - 60%**ALLOCATED TO IRRIGATION



# what do I need to know about EALL levels at home?

#### LEADS FACTS:

- LEAD (PB) IS A NATURALLY OCCURRING ELEMENT.
- LEAD IS NATURALLY FOUND IN BEDROCK ORE, BUT RARELY FOUND IN SOURCE WATER.
- THE MAIN SOURCE OF LEAD IN DRINKING WATER IS THROUGH CORROSION OF PLUMBING MATERIALS WITH LEAD COMPONENTS, SUCH AS PIPES, SOLDER, FAUCETS, AND FITTINGS.
- THE AMOUNT OF LEAD DISSOLVED INTO DRINKING WATER DEPENDS
   ON FACTORS SUCH AS PH, ALKALINITY, WATER TEMPERATURE, WATER
   HARDNESS, LENGTH OF PIPING, AND THE AMOUNT OF TIME WATER IS LEFT
   IN PIPES.
- MOST STUDIES SHOW THAT EXPOSURE TO LEAD-CONTAMINATED WATER ALONE WOULD NOT BE LIKELY TO ELEVATE BLOOD LEAD LEVELS IN MOST ADULTS, EVEN EXPOSURE TO WATER WITH A LEAD CONTENT CLOSE TO THE EPA MAXIMUM LEVEL FOR LEAD.



 $\mu g/L = MICROGRAMS PER 1,000 LITERS$ 



RESULTS FOR ALL EIGHT
KINGSBRIDGE SAMPLES CAME BACK
WITH CONCENTRATIONS OF LESS
THAN 7.0 µg/L WHICH IS LESS THAN
HALF OF THE ALLOWABLE LIMIT.

**EPA** Limit

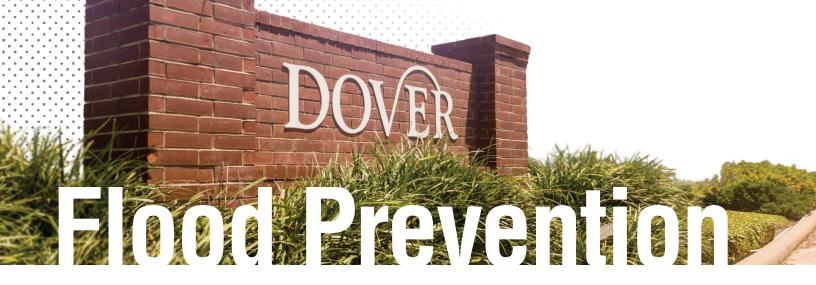
KBMUD LEVELS

In the State of Texas the Texas
Commission on Environmental
Quality (TCEQ) sets the guidelines
for and manages the testing of public
drinking water. One of these tests is
to determine if the water meets the
Environmental Protection Agency's
limit of 15 µg/L.

While water pumped out of the ground or from lakes and delivered to homes does not generally have a detectable lead concentration, internal plumbing fixtures in older houses may deposit lead into the water. This was thought to be the case when sampling was conducted in the Fall of 2015. Of the 20 houses that were sampled, most

had non-detectable levels of lead but four houses showed concentrations over the 15  $\mu$ g/L limit.

In an effort to be pro-active, Kingsbridge MUD contracted an independent laboratory to sample the four houses both at the kitchen sink and at the outside faucet. Since each of the samples are collected by the homeowners themselves, the lab took time to meet with the four residents and explain the sampling procedure telling each of them why it was important to collect the samples properly and avoid erroneous readings.



#### Flood Prevention Can Help in Other Ways Too:

- Standing water is a haven for mosquitoes.
   Proper drainage channels can do wonders to reduce mosquito populations.
- Flooding can cause major stress for homeowners worried about how severe damage can get.
- The economic impact of flooding is not just limited to property damage, time lost at work for cleanup can become a major factor.

## Dover Neighborhood New Storm Sewer Expansion

Storm drainage in Dover has been a big issue becoming significantly more problematic in the last decade. Present drainage capability has left Dover homes at risk during heavy rains with the water rising up to and inside the front doors of several homes. To help prevent the water flow from rising and potentially causing property damage this project was undertaken by the Kingsbridge Municipal Utility District.

Construction on the Dover Storm Sewer Expansion will begin in August 2016 and take one year to complete from start to finish. Please note that not all of the Dover streets will be affected directly by this construction. Streets along the path of construction will have a 1 week period of limited access to driveways, sidewalks and some portions of the front yards. Any yard along this path will be documented beforehand to ensure it is restored to its original state after construction.

The total changes to be made include new inlets along Royal Hill and Moorfield and to increase the size of selected pipes within the neighborhood. Mailings to the residents who will be affected by this will begin in June 2016.

# Construction will begin in August 2016, and take one year from start to finish.

### 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. Residents can do their part to help keep the storm sewers free of yard waste by sweeping or blowing any leaves back into your yard when taking care of your lawn.





MUNICIPAL UTILITY DISTRICT

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Vice President John Buhner

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Assistant Secretary
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<b>Operator</b> Si Environmental		Bob Leared Interests bli-tax.com	713-932-9011
sienv.com	832-490-1600	Communications	
Engineer Miller & Associates	713-977-4700	Blue Umbrella blueumbrellaco.com	281-766-4276

#### **Other Contacts:**

Trash Pickup	281-313-2378		
Best Trash	201-313-2370	Sheriff's Office	
Water Leaks		Fort Bend	281-342-6116
Si Environmental	832-490-1500	District Security Patrol	
Gas Leaks		SEAL Security	713-766-1600
Centerpoint Energy	800-752-8036		