



City of Kerrville

701 MAIN STREET • KERRVILLE, TEXAS 78028 • 830.257.8000 • KERRVILLETX.GOV

## Dear City of Kerrville Water Customer,

With the end of summer rapidly approaching and rainfall far below normal, we'd like to share with you some useful information about the City's stewardship of our water resources, as well as ways in which water consumers can do their part in our Drought Management Plan. We also have some information to share with you regarding recent test results affecting a limited area of Kerrville water customers.

The City of Kerrville works diligently to manage both the quality and quantity of water available to Kerrville residents and businesses. Most recently, the City has allocated \$6.9 million dollars to fund important improvements and maintenance to our overall water system, including an additional water source, storage improvements, and upgraded water mains.

Our team of planning and production engineers, water quality experts, laboratory technicians, administration, and staff provide over 1.5 billion gallons of safe, drinkable water to the citizens of Kerrville each year. Additionally, water rates for Kerrville citizens have not increased since 2012, and we do not anticipate an increase in 2015.

## WHAT THE CITY OF KERRVILLE IS DOING...



1. **Leak letters** – If our meters detect continual or unusual water usage, the City will send you a courtesy notification. Often leaks are not visible or are small, so this letter may be the only way a customer knows to check for a leak.



2. **Data Logs** – In order to better manage water usage or help pinpoint a leak, it is useful to see how and when water is used. Customers can call Water Records at 830.258.1504 and request a free data log. This easy-to-read report shows water usage by day and even by hour for the last 90 days.



3. **Dye Tablets** – The Water Records office, located at 701 Main St., offers free dye tablets which allow you to check for a toilet leak before calling a plumber.



4. **Lawn Watering Gauge** – Measure how much water your sprinkler is providing to your lawn with our free gauge. Over watering not only wastes valuable resources, but can also harm your plants and lawn.



5. **Brochures, Literature, Presentations** – Need information on water for your home, business, school, club or organization? The City of Kerrville will provide free written information or speakers for your event.

# WHAT YOU CAN DO...

1. Fix leaks around your properties. A single dripping faucet can waste over 2000 gallons of water per year, and a broken toilet wastes even more.
2. Use drought-resistant plants in your landscaping. Many native species are already adapted for low rainfall periods.
3. Turn off the water when not actively using it. Simply turning off the water while you are cooking, washing your car, brushing your teeth, or shaving can save thousands of gallons a year.
4. Install low-flow shower heads and toilets, as well as faucet aerators.
5. Water within the times set forth in our City of Kerrville Water Management Plan:

HOW & WHEN YOU CAN WATER					
Year Round Water Conservation (Mandatory)	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
<b>Automatic &amp; Hose End Sprinklers, and soaker hoses are permitted:</b>  6:00 PM to 10:00 AM  EVERYDAY	<b>Automatic &amp; Hose End Sprinklers, and soaker hoses are permitted:</b>  6:00 AM to 10:00 AM and 8:00 PM to 12:00 AM  TUES & SAT ODD ADDRESSES  WED & SUN EVEN ADDRESSES	<b>Automatic &amp; Hose End Sprinklers, and soaker hoses are permitted:</b>  6:00 AM to 9:00 AM and 8:00 PM to 10:00 PM  TUES & SAT ODD ADDRESSES  WED & SUN EVEN ADDRESSES	<b>Automatic &amp; Hose End Sprinklers, and soaker hoses are permitted:</b>  6:00 AM to 9:00 AM  TUES & SAT ODD ADDRESSES  WED & SUN EVEN ADDRESSES	<b>Automatic &amp; Hose End Sprinklers, and soaker hoses are:</b>  PROHIBITED AT ALL TIMES  PROHIBITED ON ALL DAYS  PROHIBITED ON ALL DAYS	<b>Automatic &amp; Hose End Sprinklers, and soaker hoses are:</b>  PROHIBITED AT ALL TIMES  PROHIBITED ON ALL DAYS  PROHIBITED ON ALL DAYS
<b>Hand-Held Hose w/ Nozzle, Drip Irrigation, or Bucket are permitted:</b>  ANYTIME  EVERYDAY	<b>Hand-Held Hose w/ Nozzle, Drip Irrigation, or Bucket are permitted:</b>  ANYTIME  EVERYDAY	<b>Hand-Held Hose w/ Nozzle, Drip Irrigation, or Bucket are permitted:</b>  7:00 PM to 9:00 AM  EVERYDAY	<b>Hand-Held Hose w/ Nozzle, Drip Irrigation, or Bucket are permitted:</b>  6:00AM to 9:00AM and 7:00 PM to 11:00 PM  EVERYDAY	<b>Hand-Held Hose w/ Nozzle, Drip Irrigation, or Bucket are permitted:</b>  6:00AM to 9:00AM and 7:00 PM to 11:00 PM  EVERYDAY	<b>Hand-Held Hose w/ Nozzle, Drip Irrigation, or Bucket are:</b>  PROHIBITED AT ALL TIMES  PROHIBITED ON ALL DAYS
<b>FOR A COMPLETE DESCRIPTION OF THE WATER MANAGEMENT PLAN, PLEASE REFER TO KERRVILLE'S CODE OF ORDINANCES, CHAPTER 110, ARTICLE III, @ <a href="http://www.kerrvilletx.gov">www.kerrvilletx.gov</a></b>					

# WHERE DOES KERRVILLE'S WATER COME FROM?



## **SURFACE WATER** **85%**

The Guadalupe River provides the majority of Kerrville's water, drawn from Nimitz Lake.

## **GROUND WATER** **10%**

The Lower Trinity Aquifer provides water via the City's eight operational wells.

## **ASR** **5%**

Kerrville was the 1st in the State and 3rd in the nation to use an innovative underground water storage system called Aquifer Storage & Recovery.

## **AQUIFER, STORAGE, AND RECOVERY (ASR)**

### **What It Is, And How We Use It...**

The City of Kerrville currently uses two Aquifer, Storage and Recovery (ASR) wells. When ASR-1 was drilled in 1990, it was the only operational ASR well in the State of Texas and the 3rd in the nation. Kerrville is fortunate to have the right type of aquifer needed for this type of water storage. ASR works by allowing a utility to take water from one source, treat it to EPA drinking water standards, inject it into a specially designed well, and pump it out in times of need.

Storage or injection usually takes place during the winter months when water demand is down due to less lawn irrigation. During summer months, the recovery pumps are turned on and stored water is pumped into the system. Storing water in the aquifer is a unique water management technique that allows for more storage, zero evaporation, less contamination, and easy access.

ASR water is regulated by the Texas Commission on Environmental Quality (TCEQ). TCEQ requires ASR water to be tested and monitored closely to ensure the quality of the water being both stored and recovered.

# IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Recently, our water system received a notice of violation from the Texas Commission on Environmental Quality (TCEQ) for sampling results that exceeded the maximum contaminant level for Total Trihalomethanes (TTHM) in the water supplied to customers. Even though this is **not an emergency**, the City believes that all customers need to be informed on the test results, what you should do, and what the City is doing to correct the violation.

Quarterly sampling events are conducted throughout Kerrville at various locations. This violation pertains to results from a single testing location near the Kerrville/Kerr County Airport (please see attached map). Although this violation only affects a small percentage of our customers, City staff is working diligently to implement additional strategies and procedures to prevent future violations at all sampling locations.

## UNDERSTANDING TTHM

### **What is TTHM?**

When Chlorine is used for the disinfection of water, it reacts with organic matter in the water and creates a by-product. This by-product is called Total Trihalomethane (TTHM) and is the most common by-product formed during the disinfection process.

### **Where else can you find TTHMs?**

They can be found in swimming pools, soft drinks, coffee, tea, and some foods. TTHMs enter the body through inhalation during bathing / showering, skin contact during swimming, and during food or drink consumption.

### **What are the maximum contaminant levels and who establishes them?**

The current maximum contaminant levels for TTHMs are .080 milligrams per liter (mg/L) which is equal to 80 parts per billion. These levels are established by the U.S. Environmental Protection Agency (EPA) and regulated by the Texas Commission on Environmental Quality (TCEQ).

### **What were the sampling results for our water?**

Our last sampling event, in the 3rd quarter of 2014, showed a running average result of .088 mg/L which is .008 mg/L over the limit. This is equivalent to being over the limit by 8 parts per billion. For comparison, 8 parts per billion is equal to 8 drops of water in an Olympic size pool.

### **What causes TTHM to be higher than normal?**

When drought conditions and extreme high temperatures exist, the water becomes warmer than usual and requires more chlorine to be used for disinfection.

### **What should I do?**

Because there is no immediate risk and the water is safe to drink, you do not need to use an alternate water source at your home or office (e.g. bottled water). However, if you wish, you may consider a water filtration device that employs a carbon filter. Such methods have shown to be effective in removing TTHM.

## What Is The City Doing To Reduce TTHMs?

- Implementing new treatment techniques with new chemicals
- Painting storage tanks with lighter colors to decrease water temperature
- Installing water mixers and aerators in water storage tanks
- Increasing sampling and testing at several locations
- Evaluating line flushing techniques and procedures

The Texas Commission on Environmental Quality (TCEQ) has notified the City of Kerrville water system that the drinking water being supplied to customers had exceeded the Maximum Contaminate Level (MCL) for total trihalomethanes. The U.S. Environmental Protection Agency (U.S. EPA) has established the MCL for total trihalomethanes at 0.080 (mg/L) based on locational running annual average (LRAA), and determined that it is a health concern at levels above the MCL. Analysis of drinking water in your community for total trihalomethanes indicate a compliance value in quarter three 2014 of 0.088 mg/L for DBP-04.

Trihalomethanes are a group of volatile organic compounds that are formed when chlorine, added to the water during the treatment process for disinfection, reacts with naturally-occurring organic matter in the water.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidney, or central nervous systems and may have an increased risk of getting cancer.

You do not need to use an alternative water supply. However, if you have health concerns, you may want to talk to your doctor to get more information about how this may affect you.

Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

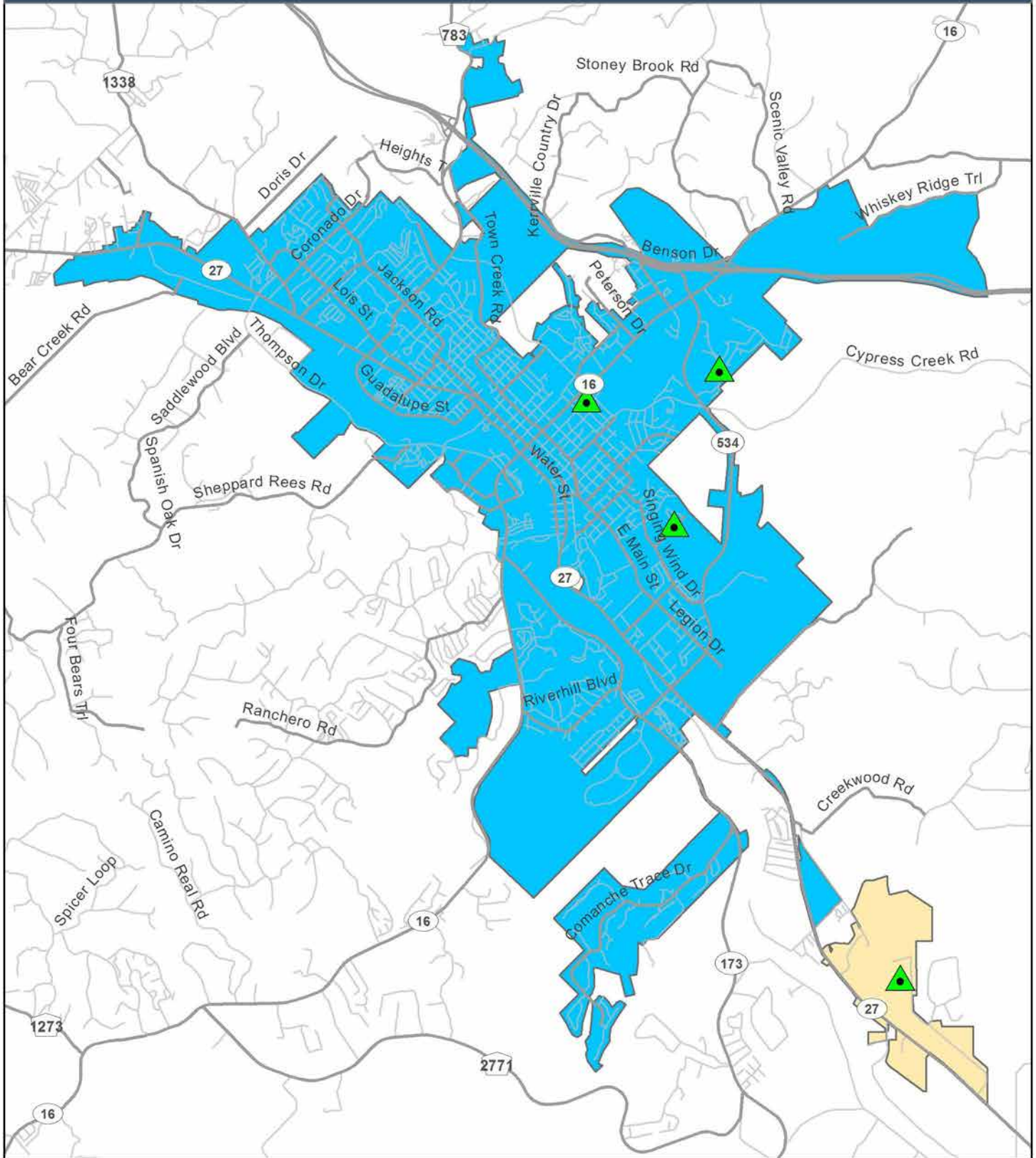
If you have questions regarding this matter, you may contact: **Mary Segovia, City of Kerrville, at 830.257.8000.**





# City of Kerrville

## TTHM Public Notice



 **Unaffected Area**     **Affected Area**     **Sampling Location**

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only approximate relative locations.