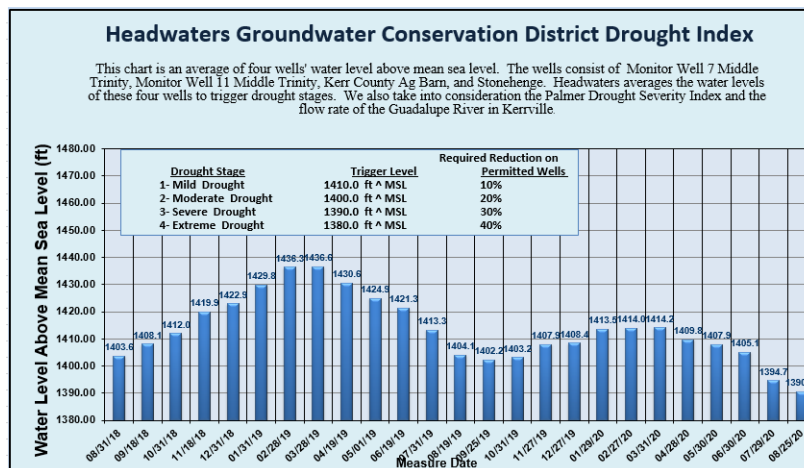


# HEADWATERS GROUNDWATER DISTRICT REITERATES DROUGHT CONDITIONS

Author: Monica Thibodeaux, HGCD Staff



Historically, the Trinity Aquifer’s water level builds in the fall and winter, then starts to drop around April and continues to do so through the summer. As the year extends into the hottest months and the chances for rain begin to decline, the Trinity Aquifer’s water level will begin to drop more rapidly. The Headwaters Groundwater Conservation District monitors the Trinity Aquifer’s water level regularly and evaluates a combination of factors when instituting a drought stage. Those factors include the average water level in the aquifer of four specific monitor wells, the Flow Rate of the Guadalupe River at Kerrville, and the Palmer Drought Severity Index. According to the USDA, Kerr County has received 19.2” of rainfall for the year, which is not far below our average of 19.65” for this time of year. Even though we experienced several rains this Spring and early Summer, our Aquifer levels have continued to drop steadily each month since March. At the end of April, the water level in the Trinity Aquifer dropped to 1409 ft. This level triggered Headwaters GCD to issue a Drought Stage One (Mild Drought) notice, which required a 10% reduction in water usage for all permitted water wells, to includes public water supply systems. At the end of July, the water level in the Trinity Aquifer dropped to 1394.7 ft, which triggered a Moderate Drought Stage Two notice. Drought Stage Two requires a 20% reduction in water usage for all permitted water wells. At the end of August, the water level in the Trinity Aquifer dropped to 1390.6 ft, which sits just above the trigger level for Severe Drought Stage Three. At this time, the rainfall forecasts for the upcoming Fall and Winter seasons are projecting to be normal. Therefore, Headwaters is hopeful that this will prevent the immediate need to trigger a Severe Drought Stage Three, but the Drought Stage Two will remain in effect until conditions improve.



During times of drought, some groundwater uses fall into the category of ‘non-essential’, which are discouraged by the District. Washing vehicles, using water to wash down sidewalks, driveways, or

buildings, and pumping water into landscape-enhancing ponds are examples of these types of ‘non-essential’ uses, as defined in the District’s Drought Contingency Plan.

As a reminder, the Headwaters Groundwater Conservation District always encourages water conservation efforts such as repairing leaky faucets and toilets or replacing them with more water-efficient options, xeriscaping with drought-resistant plants, and minimizing lawn watering. Small things such as turning the faucet off while you brush your teeth or only running the dishwasher when it’s full are small, easy ways that you can conserve water. If you run the water while you wait for it to get hot, consider capturing that water and using it on your household plants or re-bottling it as drinking water for your family. Using and regularly reapplying mulch to your flowerbeds is an added step that will help the soil retain moisture and reduce the amount of needed watering. If you have automatic sprinklers, stage the timer in several short sessions rather than one long session. This will allow the ground to absorb the moisture better. It will also prevent runoff. Also, check the sprinkler heads regularly to make sure that they are not broken or mistakenly spraying paved areas. For domestic well-users, leaks can occur in the plumbing between the well and the home. If the automatic pump turns on and off while there is no water being used, a leak could be present. Checking the pump regularly can give early insight and prevent a prolonged leak. It will also reduce the potential for an unnecessary and costly pump replacement.

Another example of water conservation is rainwater harvesting. Rainwater harvesting utilizes a home or building’s rooftop to collect water. The rooftop provides a large surface area for rain to gather. A 1,000-square foot roof can collect 600 gallons of water from a one-inch rainfall. The best thing about rainwater is that it is free from many pollutants as well as salts, minerals, and other natural contaminants. Rainwater collection systems typically consist of gutters installed on a home or other structure that feed into a catchment of some sort, to include existing storage tanks, inexpensive rain barrels, or the water can be routed directly into an attractive rain garden.

Additional useful information can be found on the following websites:

Conservation Tips for the Home: <https://agrillife.org/drought/your-home/>

Conservation Tips for the Yard: <https://agrillife.org/drought/your-lawn-garden/>

Palmer Drought Severity Index:

[http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/regional\\_monitoring/palmer.gif](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/regional_monitoring/palmer.gif)