

Mill Creek Watershed Newsletter



While we still have two months and several holidays before 2025 kicks off, planning has started for a new year of education, outreach events, and community meetings for Mill Creek! Based on stakeholder input, we are scheduling a riparian management workshop, more visits to the Bellville Farmers Market, and a new mailer outreach program.

However, there's still one big event this year! If you live in the watershed, plan to join us for the Mill Creek Cleanup on November 9! Since the watershed is almost entirely privately owned, our creek cleanup events look a little different. For two weeks before the event, we will have cleanup kits available at the Austin and Washington County Extension Offices. Residents can pick up a kit, clean up an area on their property, and then bring the collected waste to us to dispose! On November 9, we will have a sponsored dumpster at a central location for drop off. Interested in participating? Contact me today!

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Newsletter Highlights

A Note from Your
Watershed Coordinator

Measurements Matter:
Temperature

Upcoming Events 2024
Sneak Peak 2025



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MEASUREMENTS MATTER: TEMPERATURE

As the fall season approaches in Texas, we might get excited about the prospect of a change in temperature. But how does temperature effect water quality in Mill Creek? This is the second article in a series exploring the water quality data collected in our watershed and why it matters.

Temperature is a measurement of how hot or cold a given substance is. Scientifically speaking, it is an assessment of the average kinetic energy of the molecules present.

Typically, we will discuss temperature in terms of degrees Fahrenheit ($^{\circ}\text{F}$) or in degrees Celsius ($^{\circ}\text{C}$). But what is the relationship between water temperature and water quality?



A variety of water quality measurements are influenced by water temperature. Aquatic plants, insects, and animals are all adapted to survive in a limited temperature range. Just like people, if the temperature isn't right, they will not live in a particular environment. One reason is that when water temperature rises, there is less dissolved oxygen available. Temperature also influences the rate of aquatic chemical reactions and the survival and reproduction rate of bacteria.



Daily variations in temperature are especially important when considering bacteria in the creek. In our watershed, daily variations in air temperature are often between 20-30 $^{\circ}\text{F}$ (e.g. 70 $^{\circ}\text{F}$ at night and 90 $^{\circ}\text{F}$ during the day). Daily water temperature variation can be smaller, perhaps 5-15 $^{\circ}\text{F}$. Fecal indicator bacteria, like

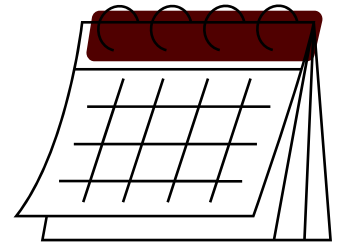
E. coli, will increase in their ideal temperature range and decrease when exposed to temperatures above or below that range. Thus, it is critical to consider the temperature when comparing data on *E. coli* concentrations. When taking water quality samples in Mill Creek, we are sure to sample sites at the same time of day to help account for temperature variations. We measure temperature because it matters!

Watershed Calendar

Winter

November 9 - Fall Cleanup

If you live in the Mill Creek Watershed, be on the lookout for more information about our Fall Cleanup. We provide a free dumpster for landowners who want to remove waste from their property, especially if it comes out of Mill Creek!



Upcoming Events - Spring 2025

Riparian Management Workshop

Is there a creek on your property? Do you have issues with erosion? Would you like to learn more about the plants and animals that live in and around the creek? This workshop is for you!

Aerobic Septic Maintenance Workshop

If you have an aerobic septic system, take advantage of this great program! Septic system function, maintenance, and best management practices are all covered. Q&A at this event is always a hit, too.

Stakeholder Meeting

If you are interested in learning more about the watershed, getting involved with program, or in making a difference in your community, join us for dinner and a meeting!