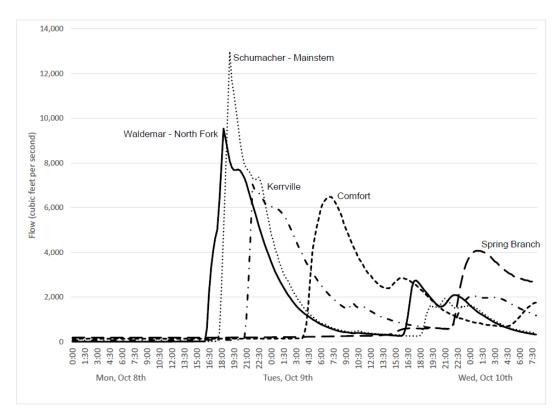


"Currents" October 2018

Flash Flooding – Understanding Your Risk

Whether you are a life-long Kerr County resident or an occasional visitor to our area, understanding your flood risk and being connected to emergency warnings is essential. Floods are the most common and widespread of natural disasters, and our area is particularly vulnerable to them. The unique geographic and atmospheric conditions of Central Texas have given our region the distinction of being the most flash flood prone area in the United States. Texas is positioned to receive rain from hurricanes as well as from storms related to large air masses moving across the state. These storms have dumped ten, twenty, even thirty inches of rain during very short time periods and sent water rushing through our rivers and streams.

A key part of to understanding your flood risk is being aware of rainfall upstream of you. A watershed is the area of land that drains to a common creek or river. When it rains anywhere within the watershed boundary, water flows into creeks and rivers and begins moving downstream. Because of these downstream flows, flooding can occur in areas where it did not rain or long after any rain has stopped. We saw this situation unfold in Kerr County just a few weeks ago on Monday, October 8th (see graph below). Heavy rainfall in the upper North Fork Guadalupe River watershed caused a sharp increase in flow along that waterway. Residents in Hunt noticed the main Guadalupe River begin to rise at Schumacher Crossing despite receiving less than an inch of rain there. Onlookers saw the water level rise approximately seven feet in 10 minutes and it quickly covered SH 39. The water receded almost as quickly. Soon after, reports from downstream low water crossings like Waltonia indicated that the flood pulse had arrived and overwhelmed the roadway there. About three hours after the flood peaked in Hunt, it arrived in Kerrville which had received minimal rainfall during the day. It took 9 more hours before the water reached Comfort, finally heading toward Spring Branch and into Canyon Lake.



In the case of the October 8th flash flood, the flood pulse moved slower, spread out, and weakened as it moved downstream. This contrasts with the flooding that has occurred more recently in several ways. First, rainfall during the week of October 15th was widespread. High accumulation of rainfall occurred in every watershed in Kerr County and every creek was pushing enormous amounts of water into the Guadalupe River. Also, the widespread rainfall completely saturated the soil and all additional rainfall ran off into creeks and the river resulting in sharp spikes in flow rates.

The conditions we have experienced this October have been stern reminders that we live in a flood prone region and must understand the risk of flooding at our homes, work place, and the roadways in-between. The majority of flood related deaths are caused by people attempting to drive through moving water. In Kerr County, it is difficult to drive anywhere without passing over a bridge or low water crossing. These areas can become covered in water in seconds during severe rain events, so stay aware and be cautious by paying attention to the weather and road conditions. Plan out safer, alternate routes and obey "road closed" signs. The best advice is to never drive through flood waters. Heed what the National Weather Service has campaigned for years: "Turn around, don't drown!"

Be aware of the flood warning resources available to you including local radio, law enforcement, alerts from the National Weather Service, NOAA weather radio broadcasts (frequency 162.45 MHz), and alerts from the CodeRED emergency notification system. Kerr County is a CodeRED community. If you are a resident, subscribe to CodeRED for free through the Kerr County Sheriff's Office (co.kerr.tx.us/eservices). You will receive emergency warning calls on your landline or cell phone directly from the Sheriff's Office. You can also download the CodeRED mobile app to receive free emergency and community warnings.

For more information visit ugra.org/public-information/education for a map of Kerr County watersheds and to view the "Be Flood Aware" video. This video was made in conjunction with Kerr County and the City of Kerrville as an additional flood awareness resource for our community. For more information on flooding in Texas including preparedness and safety information, visit the National Weather Service webpage weather.gov/safety/flood.

Let's Keep Our River Clean

Tara Bushnoe, Natural Resources Coordinator for UGRA, tbushnoe@ugra.org or (830) 896-5445