

AZWSC Seminar Session

September 17th, 2015

Arizona Water Science Center Responds to Catastrophic Flooding:

The Memorial Day Flood on the Blanco River near Austin Texas

Brandon T. Forbes

Abstract

On May 25th, 2015 the Blanco River Watershed near Austin Texas experienced catastrophic flooding which caused significant loss of life and property along its banks. Unprecedented amounts of rainfall occurred in Texas during the month of May which primed the watersheds for runoff, and when large rainstorms hit on Memorial Day weekend, the Blanco River rose to record levels. Bridges were overtopped and USGS stream gages were submerged as the floodwaters rose about 40 feet in just 4 hours during the night of the 25th. A team of Scientists from the Arizona Water Science Center with support from the Texas Water Science Center were deployed shortly after the event to conduct seven indirect discharge estimates on the Blanco River and streams in the surrounding areas where direct measurements were impossible perform during the flood. I will discuss some of our experiences while working in an area recently devastated by a natural disaster of this magnitude. Additionally, I will highlight techniques used when conducting slope-area estimates of this scale, as well as some of the difficulties encountered when working in areas with heavy vegetation, channels with flowing water present, and rivers with low water-surface slope.