

February 26, 2019

**RE: Impact of Flooding on Wastewater Treatment System  
West Morgan East Lawrence Water And Sewer Authority**

The three (3) month period from December, 2018 through February, 2019 has produced extensive flooding throughout much of Alabama, particularly those areas north of Montgomery and in particular the Tennessee and Coosa River Basins. These conditions have resulted in many people being evacuated from their homes and closure of some businesses that have been impacted by the rising waters. Following the rain events of February 22<sup>nd</sup> and 23<sup>rd</sup> several lakes and rivers have remained a levels above flood stage and unable to reseed so as not to impact downstream communities. The events of the last 90 days are the sixth highest rain totals recorded for such a time period.

Below ground utilities, particularly waste and sewer, undergo significant stress during these type events. The immediate impact on sewer is one of surcharge conditions within sewer systems due to flood waters covering property that typically above water levels. These conditions can generate overflow conditions when lines and manholes are filled beyond capacity and lift stations become hydraulically overloaded. Such conditions are monitored by the respective utilities and a designated course of action for such events is required by the Alabama Department of Environmental Management (ADEM) within the NPDES Permits for wastewater systems. Reporting of Sanitary Sewer Overflows (SSO) and their impact on the adjacent service area is performed by the respective utilities. This includes notices to ADEM and to local Health Departments as well as placement of signage in the areas near such an overflow.

The two wastewater systems owned and managed by the West Morgan East Lawrence Water & Sewer Authority are the Mallard Fox West Wastewater System and the Courtland Wastewater System. The conditions described above have impacted these two wastewater utilities with the actions required by ADEM addressed. Short term actions are being undertaken to stop any such SSO events through use of portable pumps and diversion of runoff and standing water. The long term action plan has been in place particularly in Courtland with extensive repairs to sewer lines and manholes to mediate this intrusion of storm water into the sanitary sewer system. This is an ongoing effort in Courtland and will be the normal operation and maintenance procedure for this system due to its age.