BACKWATER FLOODING IN SAN MARCOS, TX FROM THE BLANCO RIVER

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Abstract

Large sections of San Marcos TX were flooded in Oct. 1998, May 2015, and Oct. 2015. Much of the flooding in Oct. 1998 and Oct. 2015 was produced by overbank flooding of San Marcos River and its tributaries by spills from upstream dams. The May 2015 flooding was almost entirely produced by backwater flooding from the Blanco River whose confluence is approximately 2.2 miles southeast of downtown. We use the stage height of the Blanco River to generate maps of the areas of San Marcos that are lower than the flood peaks and compare those results with data for the observed extent of flooding in San Marcos. Our preliminary results suggest that the flooding occurred at locations more than 20 feet lower than the maximum stage height of the Blanco River at San Marcos gage (08171350). This suggest that the datum for either gage 08171350 or 08170500 (San Marcos River at San Marcos) or both are incorrect. There are plans for the U.S. Army Corps of Engineers to construct a Blanco River bypass that will divert Blanco River floodwaters approximately 2 miles farther downstream, but the $60 million price makes its implementation problematic.

Key Words: Texas floods, backwater flooding, flood management