



**US Army Corps
of Engineers®**
Fort Worth District

Sponsor: City of Brownwood

Reducing flood risk along Willis Creek

Project Fact Sheet

Continuing
Authorities
Program (CAP)

May 13, 2016

Type of Project: Section 205, Local Flood Damage Reduction

Authorization: 1948 Flood Control Act, as amended

Latest Project Milestone: In Feasibility Phase

Background: Flood risks in the city and specifically from Willis Creek are substantial, exacerbated by flat terrain and urbanization. The 1990 flood came after 18 inches of rain fell April 17 to May 4. Lake Brownwood hit a record high, sending more than 7 feet of water over the emergency spillway. Most routes from the city were cut and Brownwood was under water 5 days. Seven feet of water covered most of the Highway 377 commercial area; 528 homes and 70 businesses were damaged or destroyed in the city, in addition to public and agricultural facilities. Damage exceeded \$10 million (1990 dollars). In 2010, Tropical Storm Hermine forced evacuation of 125 residents, some by helicopter.

As part of an ongoing feasibility study process, the city and the U.S. Army Corps of Engineers are working toward a recommended plan that provides significant flood management benefits, provides the most effective use of limited public funding and minimizes the impact on the riparian environment of Willis Creek. The city and Corps propose a grass-lined bypass channel, with 3.5:1 side slopes, be dug parallel to Willis Creek from just east of Highway 377 downstream to the 14th Street/Custer Bridge area where it would rejoin the main channel. The bypass channel, dry except during major storms, would deliver significant flood management benefits. The adjacent neighborhood has been particularly hard hit by chronic flooding.



Structures at risk

Chronic flooding of Willis Creek continues to expose city residents to life safety dangers and structure damages as shown in this color-coded map. It shows structures subject to damage, and the frequency of those flood events today.