At approximately 7:30 a.m. on June 9, 2010, TX-TF1 was activated by TDEM to prepare for severe weather and heavy rains across Central Texas. The NWS predicted that the severe weather and heavy rain activity would produce flooding in Central, North, and Southeast Texas. Rainfall totals were predicted to range from 2 to 4 inches, with local amounts of 5 to 8 inches, and isolated amounts up to 8-12 inches. The severe weather and heavy rains was predicted to be concentrated East of I-35 and North of I-10 and last until the evening of June 10.

In order to prepare for the severe weather and heavy rains, TX-TF1 mobilized and deployed 7 Water Rescue Squads to locations throughout Central and North Texas. Additionally, TX-TF1 mobilized and pre-staged 3 HSARTS and 1 HSART Manager supporting 2 UH-60 Blackhawk helicopters and staged them in San Antonio, and activated the ESF-9 Coordination Center based out of College Station, Texas. All personnel and Water Rescue Squads worked with local officials throughout the event to provide assistance to jurisdictions when requested.

On the evening of June 10, after the threat of flooding across Texas had subsided, TDEM released all TX-TF1 personnel from standby status.