On August 14, 2007, the fifth named storm of the 2007 Hurricane season formed in the Gulf of Mexico. A tropical storm watch was immediately issued for the Texas Coast from Freeport South to Brownsville with the depression forecasted to make landfall by August 16.

Due to the heavy rains and flooding in May, June, and July, many Texas rivers and lakes were already at capacity, making the threat of Tropical Storm Erin even more serious. As part of preparations for the anticipated flooding, on August 14, GDEM deployed search and rescue resources to Central and South Texas. As part of the resource request, TX-TF1 deployed 6 Water Rescue Squads along with 6 HSARTS supporting 3 TXMF UH-60 Blackhawk helicopters to the San Antonio and Austin area. Additionally, 1 ESF-9 Coordinator was deployed to the SOC, and 2 ESF-9 Liaison Officers were deployed to the DDC in San Antonio and McAllen, Texas.

TX-TF1 teams were staged and prepared to deploy to the most impacted areas. Tropical Storm Erin made landfall on August 16 near Lamar, Texas, continuing over land across Texas before moving northward into Oklahoma.

Flooding from Tropical Storm Erin caused at least 16 fatalities and worsened the already severe flooding situation throughout the State of Texas. TX-TF1 teams remained deployed for a total of 4 days responding to calls for assistance throughout the affected areas. All TX-TF1 resources demobilized on August 17.