On October 20, 2005, FEMA deployed 4 FEMA US&R Task Forces to Florida in advance of Hurricane Wilma. In order to support the deployment, FEMA activated a FEMA US&R IST and requested that TX-TF1 personnel deploy and support staffing of the IST. The IST established a base camp in Orlando, Florida, and began planning operations for the 4 FEMA US&R Task Forces.

Hurricane Wilma made landfall on October 24, and was the most intense hurricane ever recorded in the Atlantic basin. Wilma was the twenty-second storm, thirteenth hurricane, sixth major hurricane, and fourth Category 5 hurricane of the record-breaking 2005 season. With winds reaching 120 miles per hour, Wilma caused widespread destruction of critical infrastructure, and over 3.2 million people lost power. The storm was responsible for 35 deaths in the US and $20.6 billion (2005 USD) in damages during its 4.5 hour path across Florida.

The initial damage reports from Hurricane Wilma were not as severe as originally predicted, and local authorities did not request assistance from any of the 4 FEMA US&R Task Forces. As a result, on October 26, the deployed TX-TF1 member received demobilization orders from FEMA.