During the winter of 2009, North Dakota received unusually large amounts of snowfall. In late March, a sudden warming and associated heavy rains began to rapidly melt the snow in the surrounding areas. This unexpected and rapid melting of the snow caused the water levels of the Red River to rise quickly and rapidly. The Red River directly threatened the City of Fargo in North Dakota. The City of Fargo began emergency sandbagging and earthen levee construction to contain the rising water levels of the Red River.

On March 27, FEMA requested that TX-TF1 deploy the FEMA IST Cache with support personnel and 2 personnel as part of the IST to North Dakota to support operations in the area. The FEMA US&R IST Cache maintained by TX-TF1 was mobilized and en route to Fargo, North Dakota, within 2.5 hours of being requested by FEMA.

Teams remained deployed until April 3, when the Red River began to recede and the threat of the river breaching the emergency levees subsided. As a result, TX-TF1 received its demobilization orders from FEMA and later that day the FEMA US&R IST Cache and all personnel returned back to College Station.