

When It Rains It Pours

Thunderstorms in West Texas are few and far between. In 2010, when Lubbock, Texas received almost 14 inches of rain in three days, it was no surprise the county roads were not prepared to handle that amount of water.

With rural roads washing away, Natural Resources Conservation Service (NRCS) was prompted to request federal assistance. In the spring of 2012, the Emergency Watershed Protection Program (EWP) finally brought relief to Lubbock County roads. The project took a lot of hard work from NRCS employees and local county officials. John Hrebik's role as State EWP Engineer involved implementation of engineering practices to be installed at each location and said he performed the hydrology calculations and the planned layout of the structures, to prevent this from happening again and negatively impacting rural residents.

"Damaged roadways not only directly impact the daily activities of the individuals living on those roads but additionally postal routes, bus routes and emergency vehicle access are negatively affected as well," Hrebik said.

Hrebik said the structures are designed not to restrict existing ditch capacity at the structure locations. In this case, the ditch capacity was approximately equal to the 100 year – 24-hour rain event. The EWP program was established by Congress to repair damages caused by flood, fire, drought, windstorm, or other natural disasters.

EWP rules state all projects are required to reduce threats to individuals' livelihood and property and also be economically and environmentally friendly.

Although the EWP program addresses many different issues, water damage repair is at the top of the list. Recently, NRCS has funded around 15 projects statewide.

Randy Underwood, NRCS district conservationist, was involved in the 2012 EWP project in Lubbock County and said the help came just in time.

"Basically, the EWP project has made the roads to where they will keep on being passable," Underwood said. "If we had had another rainfall event, like we had before, what would happen is that road would probably be completely wiped out."

Underwood explained NRCS designed a series of grade stabilization structures along several county roadsides to stop erosion. The construction slows down water flow and catches debris, keeping roads clear.

Funding was also an important factor in bringing the EWP project to Lubbock County. NRCS and the county provide the money. Mark Heinrich, Lubbock County Commissioner for Precinct 2, was in charge of financial backing.

Heinrich said the project's total cost was \$186,200, but Lubbock County only paid \$46,550 of the total funding. The project was completed in 25 days, recovering parts of County Roads 3700 and 2340.

Next time a freak thunderstorm passes through, a couple of Lubbock County's roads will be better prepared thanks to EWP.

"Before, passage and safety were affected," Heinrich said. "The EWP will keep it safe, and keep it from washing out." **T**



Before, During, & After EWP Project
Top & Middle Photo Courtesy NRCS

