History of the Dam:
East Fork Above Lavon Dam No. 4 was constructed in 1959 for flood control in a rural part of Collin County, Texas in the Trinity River Watershed.

The dam was constructed by the Upper Elm-Red Soil Conservation District with the assistance of the USDA Natural Resources Conservation Service’s Watershed Program.

The dam provides multiple benefits to the community including flood control, improved water quality through sediment and erosion control, and improved wildlife habitat.

A roller compacted concrete spillway was constructed over the top of the dam during rehabilitation to replace the current earthen spillway.

Why Rehabilitate the Dam?
The dam was constructed as a low hazard dam in 1959, in a rural area when the population of Collin County was less than 14,000. Today, the county's population is over one million. The dam was reclassified as a high hazard dam because it no longer met current state or Federal design criteria and performance standards.

A potential breach of the dam could have flooded two houses, the Third Monday Trade Days flea market and U.S Highway 380.

Rehabilitation Details:
Rehabilitation includes constructing a 270 feet wide roller compacted concrete (RCC) spillway in the center of the dam, extending the dam across the existing auxiliary spillway making the RCC over the top of the dam the only auxiliary spillway.

The existing principal spillway is being removed and replaced with a covered drop inlet and a 30-inch outlet pipe.

The new principal spillway outlet pipe will discharge into a concrete outlet structure located within the RCC stilling basin with rock rip-rap at the conversion to the downstream channel.

Project Cost:
NRCS is providing technical assistance and 65 percent of the design and construction cost and project sponsors are providing easements and land rights for the project and 35 percent of the cost.

Benefits:
The rehabilitation project will ensure the continued and improved flood control protection, improved water quality through sediment and erosion control, and improved wildlife habitat.

The rehabilitation project provides direct benefits to the immediate area and also provides resource conservation, economic benefits and public safety benefits that extend well beyond that area. Rehabilitation extended the dam’s life and its benefits for another 100 years.

Project Partners:
Upper Elm-Red Soil Conservation District
City of McKinney, Texas
USDA Natural Resources Conservation Service

For More Information Contact:
Mark J. Northcut, NRCS Landscape Planning Leader
Temple, Texas
254-742-9824
mark.northcut@usda.gov