East Fork Above Lavon Watershed Dam No. 2A Rehabilitation Project Collin County, Texas

February 2017

Watershed Program.

Fact Sheet

History of the Dam: East Fork Above Lavon Watershed Dam No. 2A is located in the city limits of McKinney Texas. The dam was constructed in 1958 as a high hazard dam by the City of McKinney and the Collin County Soil and Water Conservation District with the assistance of the Natural Resources Conservation Service (NRCS)

The dam is one of 64 dams in the East Fork Above Lavon Creek Watershed.



Rehabilitation included widening the auxiliary spillway and armoring it with articulated concrete block armoring.

Why Rehabilitate the Dam?

The dam was originally designed as a high hazard dam with a 50-year service life. It was constructed to help control flooding and to manage sediment. Because of high population growth, land use changes, and changes in dam safety standards the 58-year old dam no longer met current dam safety standards.

Developers wanted to develop the area around the lake and were willing to participate in the cost of sediment removal and provide the land to place the sediment.

Rehabilitation Details:

Rehabilitation included removing sediment, raising the top of dam by 3.5 feet, lengthening the embankment, installing a new principal spillway pipe, riser and appurtenances, installing an impact basin, flattening the downstream slope to 3:1, constructing a rock riprap wave berm, and widening the auxiliary spillway and armoring it with articulated concrete blocks.

Project Cost:

The NRCS provided technical assistance and 65 percent of the design and construction costs. The Texas State Soil and Water Conservation Board provide 18% of the construction costs and the remainder of the funds was provided by the City of McKinney.

The total construction cost of the rehabilitation project was \$3.8 million. Federal funds for the project came from NRCS Small Watershed Program Rehabilitation funds.

Benefits:

Rehabilitation of the dam brought it up to current State dam safety criteria and extended its life and benefits for another 100 years. It will continue to provide flood protection for homes, streets, businesses, and roads downstream. It will also store sediment and keep it from flowing downstream. The project also made the area more attractive and safer for urban development.

Partners:

City of McKinney Texas Collin Co. Soil and Water Conservation District Collin County Natural Resources Conservation Service Texas State Soil & Water Conservation Board

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