

Lower Brushy Creek Watershed Dam No. 20 Rehabilitation Project Williamson County, Texas

Fact Sheet
August 2020

History of the Dam:

Lower Brushy Creek Watershed Dam No. 20 was constructed in 1965 by the Lower Brushy Creek Water Control & Improvement District with the assistance of the Natural Resources Conservation Service (NRCS) Watershed and Flood Prevention Program.

Why Rehabilitate the Dam?

The dam was constructed as a low hazard dam to protect rural agricultural from flooding. The dam was later reclassified as a high hazard dam due to downstream development and it no longer met current state and Federal safety and performance standards.

Failure of the dam could result in the flooding of several houses and a wastewater treatment plant in Thorndale.



The height of the dam is being raised and rip rap rock is being added to the front slope for wave protection.

Rehabilitation Details:

Rehabilitation includes raising the top of the dam by 2.4 feet, flattening the upstream and downstream slope to 3:1, reconstructing an upstream wave berm, adding rock riprap on the front slope of the dam for wave protection, and treating the embankment slopes with lime-treated earth fill to help with the shrink-swell nature of the earth fill material.

The crest of the auxiliary spillway is being raised by 0.4 feet and it is being widening from 80 to 110 feet. The existing principal spillway was removed and a new standard inlet tower with a

36-inch conduit and an impact basin at the outlet was installed.



A new principal spillway has been installed during the project.

Project Cost:

Estimated cost of the rehabilitation of the dam is \$2.0 million. 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 bring the dam up to current dam safety standards and will ensure the continued and improved flood control protection, improved water quality through sediment and erosion control, and improved wildlife habitat .

The dam will provide \$77,700 in annual benefits from reduced flood damages.

Rehabilitation will extend the dam's life and its benefits for another 65 years.

Project Partners:

Lower Brushy Creek Water Control & Improvement District
USDA Natural Resources Conservation Service

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