

Olmitos & Garcias Creeks Watershed Dam No. 7 Rehabilitation Project Starr County, Texas

Fact Sheet
March 2017

History of the Dam:

Olmitos and Garcias Creeks Watershed Dam No. 7 is located six miles east of Rio Grande City in Starr County, Texas. The dam was constructed in 1963 by the Starr County Commissioners Court and the Starr County Soil and Water Conservation District with the assistance of the USDA Natural Resources Conservation Service (NRCS) Watershed Program.

The dam is one of seven dams in the Olmitos and Garcias Creeks Watershed Project that were constructed to provide flood control for agricultural lands.

Flooding in the 99,840 acre watershed occurred frequently before the dams were constructed. Between 1923 and 1957 there were 12 major floods that inundated more than one-half of the flood plain and 52 minor floods. These floods destroyed crops, eroded the soil, killed livestock and washed out roads.

Local watershed project sponsors requested assistance from the NRCS in 1959 to develop a watershed work plan to address the flooding. The plan called for the construction of the seven flood control dams and channel improvement.



The original earthen auxiliary spillway for the dam was replaced by a wider roller compacted concrete (RCC) spillway during the rehabilitation project.

Why Rehabilitate the Dam?

The dam was originally designed as a low hazard dam in a rural setting with a 50-year service life. Since construction of the dam there have been changes in land use and population in the watershed and in the required dam safety standards. The dam was reclassification as a high hazard dam and did not meet current safety criteria.

Rehabilitation Details:

The project consisted of rehabilitating the existing earthen dam to meet current high hazard criteria. The existing 30-inch diameter principal spillway conduit was abandoned and replaced it with a 42-inch concrete pressure pipe conduit; the auxiliary spillway was expanded and protected with roller compacted concrete (RCC); a chimney filter/drain was installed; an upstream soil-bentonite slurry wall was installed in the foundation; and the height of the embankment was raised.

Project Cost:

The NRCS along with the Texas State Soil and Water Conservation Board provided funding for the \$6.2 million rehabilitation project. The project sponsors obtained needed land rights and easements.

Federal assistance for the project came from the NRCS Small Watershed Program Rehabilitation funds.

Benefits:

Rehabilitation of the dam brought it up to current State dam safety criteria and extended its service life and benefits for another 50 years.

The dam provides flood protection for about 730 Texans who live and work downstream, protects sixteen city streets, one Farm to Market road, one railroad and one U.S. Highway that together support over 14,000 vehicles daily. The dam also protects power lines, water lines and fiber optic cables. The rehabilitation project is expected to provide about \$255,000 in average annual flood damage reduction benefits.

Partners:

Starr County Commissioners Court
Starr County Soil & Water Conservation District
Texas State Soil and Water Conservation Board
USDA Natural Resources Conservation Service

For More Information Contact:

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