



NRCS Assisted Watershed Dams in Texas 21st Congressional District

In the mid-1930s, Congress began looking at ways to complement the downstream flood control program of the Corps of Engineers. It passed flood control acts in 1936, 1944, and 1954 and assigned responsibility of the Watershed Protection and Flood Prevention Program to the USDA Soil Conservation Service, now the Natural Resources Conservation Service (NRCS).

Since that time, NRCS has assisted watershed sponsors in construction of nearly 2,000 floodwater retarding structures (dams) in 145 watershed projects across Texas. In addition, NRCS has assisted watershed sponsors with the installation of land treatment practices and channel improvements for watershed protection. Texas watershed projects provide **\$150 million** in annual benefits.

The watershed projects which impact the 21st Congressional District provide **\$12.1 million** in annual benefits, as well as capturing 243,000 tons of sediment annually. About 230 bridges and numerous county, state, and federal roads are also protected.

There are **31 constructed watershed dams** in 6 watershed projects in the district. *See the table on the back of this page for the annual benefits provided by watershed projects in the 21st Congressional District*

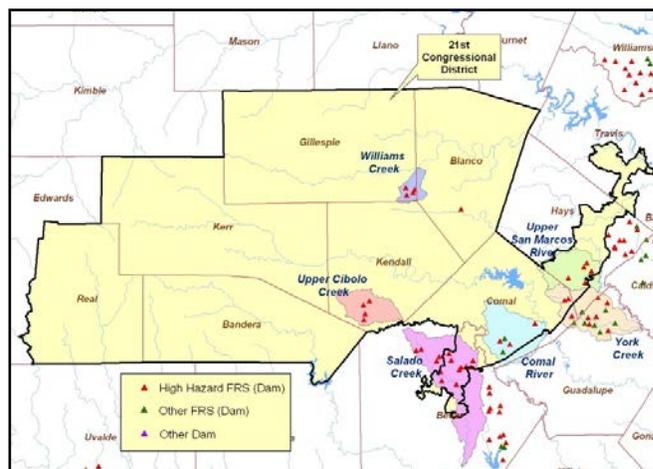
In just one storm on June 29, 2007, the Salado Creek Watershed dams provided \$900,000 in flood damage reduction benefits.

Operation and Maintenance of Watershed Projects

The annual operation and maintenance of dams and their components is the responsibility of project sponsors (local units of government, usually conservation districts, city and county governments, and special purpose districts).

A list of sponsors for the watersheds located in the 21st Congressional District is on the back of this page.

Operation and maintenance of watershed dams can be expensive and labor intensive, but is necessary to ensure the dams function as designed and remain safe. Maintenance work includes clearing trees from dams and spillways, repairing soil erosion damage, repairing damages after heavy storm events, and keeping the principal spillway inlet clear of debris.



In the Central Texas Flood of 1998, flooding depths in San Antonio were reduced by five feet at the Loop 410 bridge. Property damage would have been millions of dollars greater and the potential for loss of life would have increased without the existing dams. Bexar County, the San Antonio River Authority, and the City of San Antonio expressed a deep appreciation for the watershed projects during this storm event

Rehabilitation of Aging Dams

NRCS assistance is available to rehabilitate aging watershed dams. A typical candidate site for rehabilitation was constructed between the late 1950's to the middle 1960's and no longer meets current safety criteria. There is one dam in the 21st Congressional District that is over 50 years old, eight that are 40-49 years old, and twelve dams that are 30-39 years old.

The majority of the 21st Congressional District was in a rural setting when the watershed projects were planned. Conversion from agricultural to urban land use has taken place and is intensifying. Many dams originally constructed as low hazard are now classified as high hazard, or will soon be high hazard as a result of downstream urbanization.

Rehabilitation of these dams is needed to protect lives and downstream property. Twenty-nine dams in the 21st Congressional District are classified as high hazard dams. Eight of these dams need to be upgraded to high hazard criteria at an estimated cost of \$12 million, including \$4.2 million in sponsor's cost.

Annual Watershed Benefits in 2011 Dollars
(Entire Watersheds)

Watershed	Total Dams Constructed	Dams in District 21	Monetary Benefits	Bridges Benefited	Wetlands Created/Enhanced (acres)	Reduced Sedimentation (tons of soil)
Comal River	5	5	\$1,041,000	59	99	45,200
Salado Creek	14	10	\$5,111,000	40	340	35,900
Upper Cibolo Creek	4	4	\$739,000	60	261	33,800
Upper San Marcos	5	5	\$3,699,000	40	0	0
Williams Creek	4	4	\$138,000	5	94	14,100
York Creek	16	2	\$1,276,000	25	502	113,600
Town Creek RC&D	1	1	\$89,000	2	5	250
Total	49	31	\$12,093,000	231	1,301	242,850

Monetary benefits include reduction in flood damages to agricultural lands and rural and urban infrastructure including roads and bridges. Other benefits include soil erosion control, recreational areas, irrigation water, municipal and industrial water supply, and wildlife habitat.

Listed below are the sponsors for watersheds located in the 21st Congressional District:

Alamo Soil and Water Conservation District

City of Blanco

City of Boerne

City of New Braunfels

City of San Antonio

Comal County Commissioners Court

*Comal-Guadalupe Soil and Water Conservation
District*

Edwards Aquifer Authority

Gillespie County Soil and Water Conservation District

*Gillespie County Water Control and Improvement
District #1*

Hays County Commissioners Court

Hays County Soil and Water Conservation District

Kendall County Commissioners Court

Kendall Soil and Water Conservation District

Pedernales Soil and Water Conservation District

San Antonio River Authority

*Upper San Marcos Reclamation and Flood Control
District*

York Creek Improvement District

Information about watershed projects and other conservation programs is available at the local conservation district or NRCS offices. For further information, refer to the Texas NRCS website located at:

www.nrcs.usda.gov/wps/portal/nrcs/main/tx/programs/planning/wpfp

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