



TEXAS STATE SOIL AND WATER CONSERVATION BOARD

Protecting and Enhancing Natural Resources for Tomorrow

1497 Country View Lane • Temple, TX 76504 • (254) 773-2250 • <http://www.tsswcb.texas.gov/>

WATER SUPPLY ENHANCEMENT PROGRAM

Meeting Critical Water Conservation Needs and Enhancing Public Water Supplies Through Brush Control

Scarcity and competition for water have made sound water planning and management increasingly important. The demand for water in Texas is expected to increase by over 17%, to a demand of about 21.6 million acre-feet in 2070; while existing water supplies are projected to decrease by nearly 11%, to about 13.6 million acre-feet. With Texas' population expected to grow by 73% over the next 50 years, the availability of water supplies is essential for not only the Texans of today but also for those of tomorrow (2017 State Water Plan).

Over at least the past century, rangeland vegetation in the United States has undergone a large-scale conversion from grasslands to woodlands and shrubland. Noxious brush, detrimental to water conservation, has invaded millions of acres of rangeland and riparian areas in Texas, reducing or eliminating stream flow and aquifer recharge through interception of rainfall and increased evapotranspiration.



Brush control has the potential to enhance water yield by conserving water lost to evapotranspiration, recharge groundwater and aquifers, enhance spring and stream flows, improve soil health, restore native wildlife habitat by improving rangeland, improve livestock

grazing distribution, protect water quality and reduce soil erosion, aid in wildfire suppression by reducing hazardous fuels, and manage invasive species.

In watersheds where WSEP grant funds have been allocated, the TSSWCB works through SWCDs to deliver technical assistance to landowners in order to implement brush control activities for water supply enhancement. A 10-year resource management plan is developed for each property enrolled in the WSEP which describes the brush control activities to be implemented, follow-up treatment requirements, brush density to be maintained after treatment, and supporting practices to be implemented including livestock grazing management, wildlife habitat management, and erosion control measures. Financial incentives are provided through the WSEP to landowners implementing brush control activities on eligible acres.

WATER SUPPLY ENHANCEMENT PROGRAM

In order to help meet the State's critical water conservation needs and ensure availability of public water supplies, the 82nd Texas Legislature, in 2011, established the Water Supply Enhancement Program (WSEP), through H.B. 1808, administered by the Texas State Soil and Water Conservation Board (TSSWCB), with the purpose of increasing available surface and ground water supplies through the targeted control of brush species that are detrimental to water conservation (for example, juniper, mesquite, saltcedar).

The TSSWCB collaborates with soil and water conservation districts (SWCDs), and other local, regional, state, and federal agencies to identify watersheds across the state where it is feasible to implement brush control in order to enhance



public water supplies (see map of approved project watersheds on reverse side). The TSSWCB uses a competitive grant process to rank feasible projects and allocate WSEP grant funds, giving priority to projects that balance the most critical water conservation need of municipal water user groups with the highest projected water yield from brush control.

Full implementation of brush control, in the 24 approved project watersheds, has a total projected annual water yield of 2.41 million acre-feet of water that could be conserved if the State was able to provide financial incentives to landowners in order to treat 15.86 million acres of brush in those watersheds.

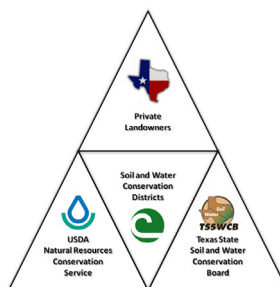


From 1999 to 2015, landowners treated over 852,068 acres of brush in priority watersheds across the state.

- \$54,244,297 in Brush Control Program funding (FY2000-2011)
- \$8,541,652 in WSEP funding (FY2012-2015)

CONSERVATION DELIVERY SYSTEM

The TSSWCB delivers coordinated natural resource conservation programs to agricultural producers through the State's 216 soil and water conservation districts (SWCDs). SWCDs serve as the State's primary conservation delivery system through which technical assistance and financial incentives for natural resource conservation programs are channeled to agricultural producers and rural



landowners. SWCDs give farmers and ranchers the opportunity to solve conservation challenges locally, instilling in landowners a stewardship ethic and individual responsibility for soil and water conservation.

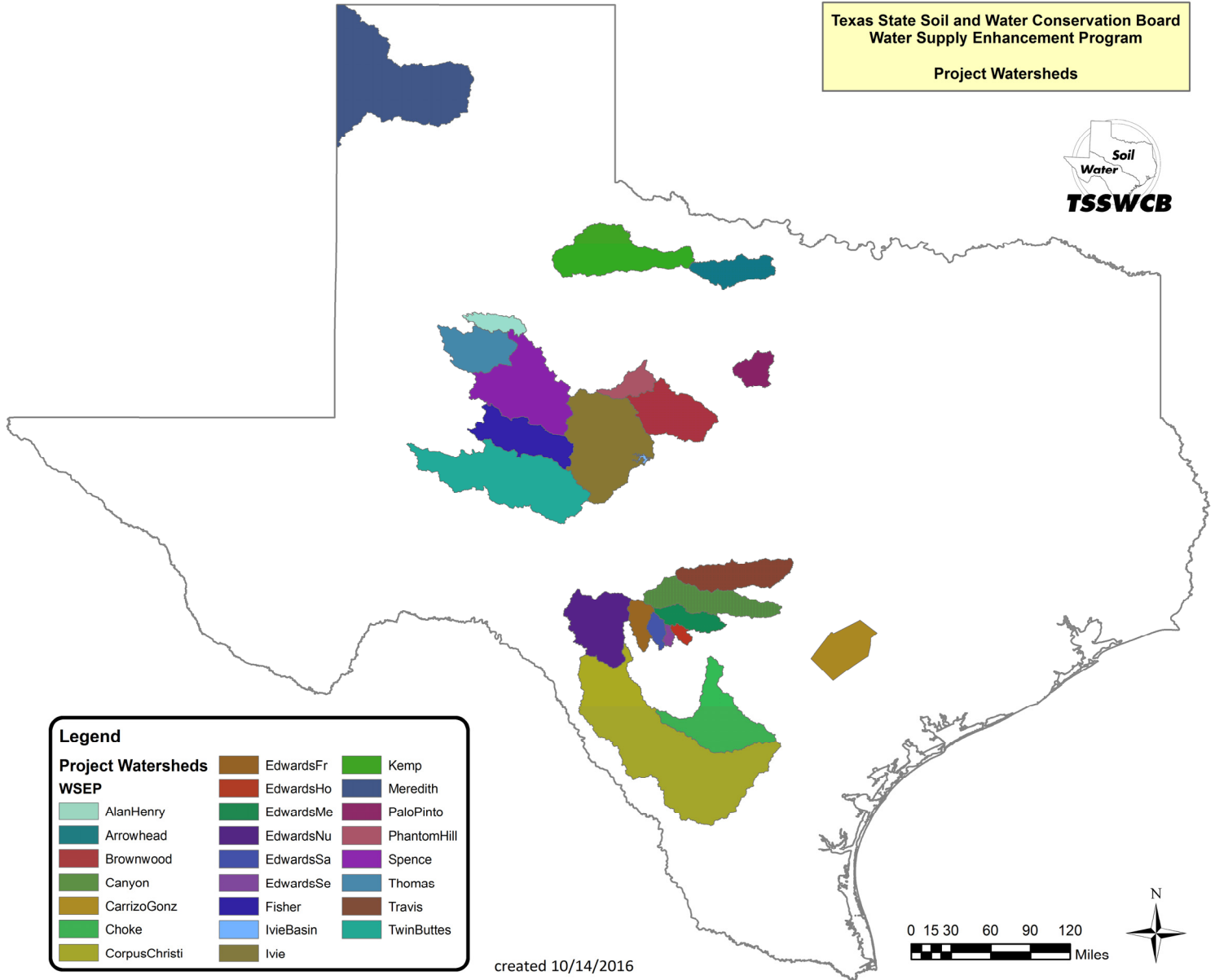
Many of the TSSWCB's programs, including the WSEP, are coordinated through the conservation delivery system of the 216 local SWCDs. This Conservation Partnership is one of the most efficient and effective mechanisms for conducting natural resource conservation programs.

FOR MORE INFORMATION

More information on the Water Supply Enhancement Program is available at:

- <http://www.tsswcb.texas.gov/brushcontrol/>
- <http://www.tsswcb.texas.gov/reports#wsep>

Contact the Water Supply Enhancement Office at (325) 481-0335.



The Texas State Soil and Water Conservation Board, established in 1939, administers Texas' soil and water conservation law and delivers coordinated natural resource conservation programs to agricultural producers throughout the state. The agency is responsible for planning, implementing, and managing programs for preventing and abating agricultural and silvicultural nonpoint sources of water pollution; administers a water supply enhancement program to increase available surface and ground water supplies through the targeted control of water-depleting brush in areas in need of water conservation; works to ensure the State's network of 2,000 flood control dams is protecting lives, private property, and public infrastructure from flood damage; works to improve border security along the Rio Grande through control of invasive carrizo cane; and facilitates the Texas Invasive Species Coordinating Committee.



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