Texas State Soil & Water Conservation Board
BRUSH CONTROL PROGRAM
2008 ANNUAL REPORT
JANUARY 1, 2008 - DECEMBER 31, 2008

PROGRAM GOAL

Enhance water availability through selective Brush Control.

2008 ACTIVITIES AT A GLANCE

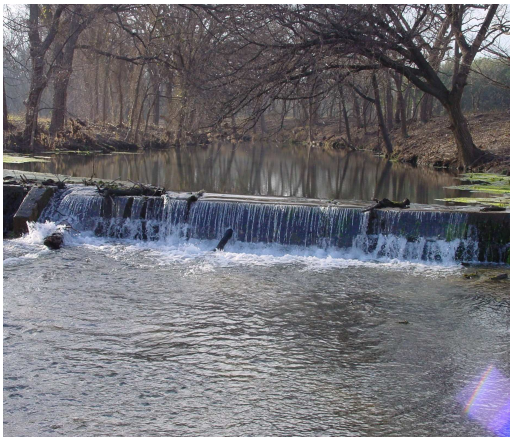
- Brush Controlled on 766,529 Acres (FY 00-08)

PROGRAM BUDGET

FY 00-01	$9,163,000 General Revenue
FY 02-03	$9,163,000 General Revenue $15,000,000 Agricultural Water Conservation Bond
FY 04	$3,114,794 General Revenue
FY 05	$607,805 General Revenue
FY 06	$1,874,176 General Revenue
FY 07	$1,816,009 General Revenue
FY 08	$1,848,927 General Revenue
FY 09	$1,840,926 General Revenue

To Ensure the TSSWCB is targeting concentrated areas for Water Enhancement, the TSSWCB began working with Texas Tech Water Resources Center and Texas A&M AgriLife Water Resources Institute to selectively clear brush using a set of predetermined criteria that will likely have the most profound and positive impact on water salvage while maintaining the ecological integrity of the landscape.

INTRODUCTION



The Texas State Soil and Water Conservation Board presents this annual report covering the 2008 calendar year. To show trends, some data from previous years is included. In fiscal year 2004, brush projects were funded from Agriculture Water Conservation Bonds and from General Revenue appropriated by the 77th Legislature. Fiscal year 2005 funding was from General Revenue appropriated by the 78th Legislature R.S. The 79th Legislature approved General Revenue funding in the amount of $1,874,176 for fiscal year 2006, and $1,816,176 for fiscal year 2007. The 80th Legislature approved General Revenue funding in the amount of $1,848,927 for fiscal year 2008. The Brush Control Program, in existence since 1999, has treated 766,529 acres. The overall goal

of the Brush Control Program is to enhance water availability through selective brush control. However, due to drought conditions that still persist in areas being treated, the water needs over the region remain critical. We must thank the Legislature for their vision in making this program a reality and express appreciation to those private landowners who are contributing their time and resources to implement a long range program to benefit others.

TWIN BUTTES RESERVOIR/ LAKE NASWORTHY PROJECTS

In September 2002, three brush control projects were initiated to enhance the amount of water flowing into the Twin Buttes Reservoir/Lake Nasworthy complex. Twin Buttes Reservoir is used to maintain sufficient water levels in Lake Nasworthy, which serves as a water supply for the city of San Angelo. Water levels in Twin Buttes Reservoir have fallen to critical levels. Based on water needs and the result of feasibility studies, the TSSWCB allocated $10.8 million for brush control cost-share for three projects in the Twin Buttes Reservoir/Lake Nasworthy Watershed. It is projected that this allocation will allow the treatment of over 220,000 acres of brush and will result in the enhancement of almost 198,000 acre/feet of water over the life of the project. Additional funding will be needed to complete the treatment of the more than 555,000 acres of eligible brush in the Twin Buttes Sub-basins. To date, over 252,729 acres of brush have been treated using state funds.

SWCDs That Have Participated in the Brush Control Program

Caldwell-Travis	Pedernales	Howard	Lower Clear Fork of
Crockett	Runnels	Kerr County	the Brazos
Eldorado Divide	Tom Green	Middle Concho	McMullen County
Glasscock County	Trans Pecos	Mitchell	Archer County
High Point	Upper Pecos	North Concho River	Dawson County
Kendall	Coke County	Rio Grande-Pecos River	Mustang
Middle Creek Fork	Devil's River	Sandhills	
Midland	Gillespie County	Toyah-Limpia	
Nolan County	Hays County	Upper Colorado	

CANADIAN RIVER PROJECT

In August 2005, in cooperation with the Canadian River Municipal Water Authority, a salt cedar project was initiated to improve water quantity and quality on the Canadian River above Lake Meredith. Funding for this project was based on the Arkansas River Shiner Management Plan for the Canadian River. It is estimated that one large Salt Cedar can use 200 gallons of water per day or one acre can use 3 - 7 acre/feet of water per year. To date, over 11,552 acres have been treated.

PEDERNALES RIVER PROJECT

In September of 2002, a brush control project was initiated to enhance the amount of water flowing from the Pedernales River Watershed into Lake Travis, a water supply for the city of Austin. The lake is also used for power generation and has become a major resort area providing opportunities for boating, fishing, swimming, and camping. The Pedernales River Watershed has been allocated over $4.4 million for cost-share. It is projected that this allocation will allow the treatment of over 62,000 acres of brush in the Pedernales River Watershed and may result in the enhancement of an estimated 317,000 acre/feet of water over the life of the project. Additional funding will be needed to complete the treatment of the 140,000 acres of brush that are targeted in the 815,000-acre watershed. Feasibility studies indicate the life of the project, treatment of the targeted acres may result in over 715,000 acre/feet of water in the Pedernales River Watershed. Landowners have submitted requests for funding to treat more than 70,000 acres in priority sub-basins. In 2002-2008, 64,510 acres were treated in this watershed.

Junipers have been documented to intercept 73% of precipitation

NUECES RIVER PROJECT

In September 2006, the TSSWCB allocated money to the McMullen SWCD to begin spraying mesquite along the Nueces River. The Nueces River flows into Lake Corpus Christi. To date, a total of $118,063 has been allocated to the project and 3,793 acres are under contract. Of that amount, 1,837 acres have been sprayed and estimated to yield 22,266.90 acre/feet of water over the life of the project according to the Nueces River Watershed Feasibility study.

WICHITA RIVER PROJECT

In September 2006, the TSSWCB allocated money to the Archer County SWCD to spray mesquite. The Wichita River flows through Archer, Wichita and Clay counties and feeds into Lake Arrowhead. Lake Arrowhead Reservoir serves as a water supply for the city of Wichita Falls. To date, $124,998 is allocated to the project by the TSSWCB and 5,952 acres have been treated. According to the Lake Arrowhead Feasibility study, the project is estimated to yield 25,484 acre/feet of water over the life of the project.

LAKE BROWNWOOD PROJECT

In March 2008, the TSSWCB allocated money to the Pecan Bayou SWCD to treat mesquite and juniper in the Lake Brownwood Watershed. The TSSWCB is concentrating efforts in the Pecan Bayou area located in two sub-basins north of the lake. Lake Brownwood is a major water supplier for the city of Brownwood as well as the surrounding areas for industrial, agriculture and municipal uses. To date, the TSSWCB has allocated $200,000 to the project and 701 acres are under contract. The Lake Brownwood feasibility studies estimated that 1,865.96 acre/feet. of water will be yielded in the two sub-basins mentioned above over the life of the project.

GUADALUPE RIVER PROJECT

In November 2007, the TSSWCB allocated $162,000. to the Guadalupe River Project to treat juniper in the Guadalupe Watershed. The TSSWCB has targeted areas in Kerr, Comal, and Kendall counties that have shown to be the highest water yielding areas in the watershed. There have been 315 acres treated in 2008 with 1,031 acres planned for treatment in the future. Research on water yield has shown this project to be comparable to the Pedernales River Watershed.

O.C. FISHER PROJECT

O.C. Fisher Lake is located in west central Texas on the North Concho River, 6.3 miles above the river's confluence with the South Concho River and approximately 65 miles above its confluence with the Colorado River. The lake is adjacent to San Angelo in the northwest corner of Tom Green County, Texas. The study area includes the majority of the fee-owned government land, above the existing lake level, operated by the U.S. Army Corp of Engineers, approximately 15,860 acres.

This project will enhance the water yield from the brush work already completed in the watershed. The recommended plan would restore approximately 3,778 acres of lake habitat, 52 acres of riverine habitat, 10 acres of intermittent riverine, and 250 acres of bottomland hardwoods. In addition, the project would restore 11,759 acres of transitional habitat. The quality of the terrestrial and aquatic habitats within the project area would benefit through the removal and control of exotic/non-native, water-loving plant species. The TSSWCB allocated $130,000 to the O.C. Fisher project to treat Salt Cedar in the lake basin. To date, 1255 acres have been treated.

A 10 foot mesquite tree can consume up to 20 gallons of water per day.

OTHER ACTIVITIES

A research team has been formed at the Texas Tech University Water Resources Center and Texas A&M AgriLife Texas Water Resources Institute to develop a mapping system to ensure the TSSWCB is concentrating efforts for both urban water supply and rural benefits. The team is comprised of Dr. Ken Rainwater, Director of the Water Resources Center and a Professor in the Department of Civil and Environmental Engineering, with experience in groundwater and surface water hydrology. Co-principal investigators shall be Dr. Ernest Fish, Professor an expert in watershed management, geographic information systems, and remote sensing, Dr. Richard Zartman, Leidigh Professor of Plant and Soil Science, an expert in soil physics and agronomy, Dr. Raqhavan "Srini" Srinivasan, Professor and Director Spatial Sciences Laboratory, Texas A&M Department of Ecosystem Science and Management, Dr. B.L. Harris, associate Director of the Texas Water Resource Institute, Lucas Gregory, Project manager and Dr. Allen Jones, Professor, Texas AgriLife Research in Dallas.

Other continuous activities by the TSSWCB:

1. Field visits to assure that that Aerial Spraying of Mesquite is applied according to Program Specifications.
2. Evaluation of future financing alternatives for the State Brush Control Program.
3. Providing training and assistance to Soil and Water conservation Districts (SWCDs) in the State Brush Control Program areas.
4. Meeting with Texas Department of Agriculture (TDA), Texas Parks and Wildlife Department (TPWD), Texas Water Development Board (TWDB), and Legislative Staff on Brush Control issues.
5. Assisting Soil and Water Conservation Districts (SWCDs) with conservation planning and performance certifications for their landowners.
6. Evaluating watersheds that meet criteria for water enhancement cost share assistance and assess landowner participation.
7. Coordinate with USDA/ NRCS to utilize federal funds to offset state costs.
8. Under contract with the TSSWCB, the Upper Colorado River Authority (UCRA) continues to monitor efforts of Brush Control on the water balance and water yield within the North Concho River Watershed.