

Activities of the Brush Control Program

January 1, 2000 through December 31, 2000

Introduction

Senate Bill 1083, Acts of the 69th Legislature, Regular Session created the Texas Brush Control Program. This program's goal is to enhance the State's water resources through selective control of brush species. Primary responsibility for program administration lies with the Texas State Soil and Water Conservation Board (TSSWCB). The law provides that each year the TSSWCB submit to the Governor, Lieutenant Governor, and Speaker of the House, a report of the activities of the Brush Control Program during the immediately preceding calendar year. The following is a summary of the activities of the Brush Control Program during calendar year 2000.

Brush Control Program Rules Revisions

On August 10, 2000, the State Board amended 31 TAC §§517.23, 517.27, 517.28, and 517.29 to correct deficiencies discovered during implementation of the brush control cost-share program and allow necessary flexibility in the brush control cost-share program. The amendment removed language from §§517.23, 517.27, 517.28, and 517.29 regarding maintenance agreements and maintenance of brush control practices. Language was added to §§517.28 and 517.29, which replaced maintenance of brush control practices with management of the treated area. The amendment also clarified the definition of a performance agreement in §517.23. The revised rules are attached.

North Concho Brush Control Project

The 76th Legislature appropriated for the FY2000 - FY2001 biennium \$8,000,000 for a pilot brush control project in the North Concho River Watershed, \$7,000,000 for brush control cost-share and \$1,000,000 for program support including monitoring and evaluation. Implementation of the entire project is expected to take ten years.

The TSSWCB, through the Glasscock County, North Concho River, Coke County, and Tom Green SWCDs, continued the implementation of the brush control project in Tom Green, Coke, Sterling, Howard, and Glasscock Counties with strong support from local landowners. The watershed contains approximately 950,000 acres of which about 432,000 acres are infested with mesquite and juniper that need to be controlled. In calendar year 2000, brush control plans were developed for 279,102 additional acres, resulting in plans covering a total of 451,342 acres of the watershed as of January 2001. Requests have been received to develop brush control plans on an additional 225,678 acres.

In calendar year 2000, cost-share applications were approved for the treatment of 115,715 additional acres, resulting in a total of 184,585 acres to be treated. However, due to the

severe drought and insect damage, aerial treatment of mesquite with herbicides could not be carried out. Therefore, only 31,104 acres have been treated to date at a cost to the State of \$1,292,686.

In addition to the 31,104 acres treated with State cost-share assistance, approximately 5,000 acres of re-growth juniper was hand grubbed by inmates. This was made possible by a January 25, 1999 Interagency Cooperative Agreement between the Texas Department of Criminal Justice (TDCJ) and the TSSWCB. Participating landowners are responsible for quality control, fuel for transportation, and feeding the inmates while working. The local soil and water conservation districts assist in determining which landowners participate in the program.

The TSSWCB contracted the Upper Colorado River Authority to perform the monitoring and evaluation activities in the North Concho watershed. The main activities include stream flow monitoring, groundwater monitoring and impaired watershed studies. These activities are being carried out with assistance from the Texas A&M University System.

In July and August 2000 at the request of the TSSWCB, the State Auditor's Office Management Advisory Services (MAS) conducted an assessment of the State Brush Control Cost Share Program. MAS identified several opportunities for the TSSWCB to enhance its overall implementation of the program. Key recommendations include developing comprehensive program-specific procedures and terminology, and establishing clearly defined roles and responsibilities for the parties involved. In addition, it was recommended that the TSSWCB restructure its handling of the program's grazing deferment cost share component. The TSSWCB agreed with the MAS recommendations and is currently working to address them by developing a guidance document for the program.

To complete the initial treatment of brush in the North Concho River watershed, \$8,000,000 was requested for FY2002-2003. Once initial treatment is completed, funding in future biennia will be needed for follow-up brush control practices to maintain the low levels of brush and resulting water yields.

Feasibility Studies

In 1999, the State Board was appropriated \$1,000,000 by the 76th Legislature to work with Texas A&M and local entities to complete eight brush control feasibility studies for the following watersheds:

- Frio River Basin
- Nueces River Basin
- Pedernales River Basin
- Wichita River Basin
- Canadian River Basin
- Middle Concho River Basin
- Upper Colorado River Basin

- Edwards Aquifer

Texas A&M was contracted by the TSSWCB to estimate water yields and determine the economic feasibility of brush control for each watershed. Local river authorities and municipal water authorities were contracted to assemble hydrologic evaluation reports for each basin. Local river authorities and municipal water authorities involved included the Canadian River Municipal Water Authority, Red River Authority, Upper Colorado River Authority, Lower Colorado River Authority, and Nueces River Authority. In addition to the involvement of these local entities, the public, landowners, local soil and water conservation districts and other local entities were involved through a series of public meetings and focus group meetings held across the state during the development of the feasibility studies. All brush control feasibility studies have been completed and distributed to the Legislature and affected SWCDs. Many of the reports were also posted on the Internet to make them more easily accessible to the public. The conclusion of all the feasibility studies was that brush control for water yield is feasible in all watersheds studied.

As a result of the feasibility studies, the TSSWCB requested \$36,263,396 as part of its FY2002-2003 Exceptional Item Request to initiate brush control projects in all eight watersheds as follows:

Pedernales River/Edwards Aquifer Brush Control	\$7,103,247
Wichita River Brush Control	\$3,882,953
Frio River/Nueces River Brush Control	\$7,202,307
Canadian River Brush Control	\$6,020,727
Upper Colorado River Brush Control	\$6,734,739
Middle Concho River Brush Control	\$5,319,423

To carry out implementation of the brush control program in each watershed above will require this level of funding for at least five biennia.

Future Feasibility Studies

Funding for additional feasibility studies is included in the TSSWCB's base request in the legislative appropriations request. As stated in the rider, "Out of the total appropriation for brush control, \$1,000,000 for the biennium is to be spent on brush control feasibility studies determined by the Legislature". To assist the Legislature in determining future brush control feasibility studies, the TSSWCB examined water needs in relation to areas where brush control for enhanced water yield is considered most feasible. Primary consideration was given to watersheds listed in Table 3.1 in the State Brush Control Plan, which identifies reservoirs where brush control could enhance water supplies. The Texas Natural Resource Conservation Commission report, "Drought 2000 - Public Water Supply Systems Affected", was then used to target those water supply reservoirs listed in Table 3.1 where water use restrictions had to be implemented due to the drought.

Therefore, the final list provides a good indication of areas that need water and where brush control has the potential to enhance these water supplies.

The TSSWCB highly recommends the following five areas to the Legislature for future study:

1. Palo Pinto Lake Watershed
2. Lake Brownwood Watershed
3. Lake Fort Phantom Hill Watershed
4. Lake Arrowhead Watershed
5. Lake Proctor Watershed

Palo Pinto Lake is located in the Brazos River Basin. Five users of Palo Pinto Lake Watershed water experienced water use restrictions during last year's drought. This affected 22,578 residents in Palo Pinto County. Other lakes that would be addressed in the study include Lake Tucker, Lake Mingus and Thurber Lake, all of which are included on Table 3.1 of the State Brush Control Plan. The Palo Pinto Lake Watershed was chosen as the highest priority, because the city of Strawn, which gets its water from Lake Tucker, had to implement the severest water use restrictions due to the drought. Soil and water conservation districts that would be affected include the Palo Pinto SWCD and to a limited extent the Lower Clear Fork of the Brazos SWCD, Upper Leon SWCD, and Cross Timbers SWCD.

Lake Brownwood is located in the Colorado River Basin. Only one user of Lake Brownwood Watershed water experienced water use restrictions during last year's drought. This affected 3,002 residents in the city of Clyde. Other lakes that would be addressed in the study include Lake Clyde and Lake Coleman, both of which are included on Table 3.1 of the State Brush Control Plan. The Lake Brownwood Watershed was chosen as the second highest priority, because the city of Clyde, which gets its water from Lake Clyde, had to implement severe water use restrictions due to the drought. Soil and water conservation districts that would be affected include the Pecan Bayou SWCD, Central Colorado SWCD, Callahan Divide SWCD, and to a limited extent the Upper Leon SWCD, Middle Clear Fork SWCD, and Runnels SWCD.

Lake Fort Phantom Hill is located in the Brazos River Basin. Eleven users of Lake Fort Phantom Hill Watershed water experienced water use restrictions during last year's drought. This affected 133,647 residents in Abilene and surrounding areas of Taylor County. Other lakes that would be addressed in the study include Lake Abilene, Kirby Lake, and Lytle Lake, all of which are included on Table 3.1 of the State Brush Control Plan. The Lake Fort Phantom Hill Watershed was chosen as the third priority because of the large number of residents affected by the water use restrictions. Soil and water conservation districts that would be affected include the Middle Clear Fork SWCD, and to a limited extent the California Creek SWCD, Callahan Divide SWCD, and Nolan County SWCD.

Lake Arrowhead is located in the Red River Basin. Eight users of Lake Arrowhead Watershed water experienced water use restrictions during last year's drought. This affected 122,030 residents of Wichita Falls and surrounding areas of Wichita, Archer, and Clay Counties. Other lakes that would be addressed in the study include Lake Kickapoo, which is included on Table 3.1 of the State Brush Control Plan. The Lake Arrowhead Watershed was chosen as the fourth priority because of the number of residents affected by the water use restrictions was slightly fewer than those affected by the Lake Fort Phantom Hill Watershed. Soil and water conservation districts that would be affected include the Archer County SWCD, and to a limited extent, the Little Wichita SWCD and the Miller-Brazos SWCD.

Lake Proctor is located in the Brazos River Basin. Five users of Lake Proctor Watershed water experienced water use restrictions during last year's drought. This affected 14,190 residents of Comanche, Erath, Hamilton, and Eastland Counties. No other lakes would be addressed in this study. The Lake Proctor Watershed was chosen as the fifth priority because of the number of residents affected by the water use restrictions was much fewer than those affected by the Lake Arrowhead Watershed. Soil and Water Conservation Districts that would be affected include the Upper Leon SWCD, and to a very limited extent the Lower Clear Fork of the Brazos SWCD.

Other potential study areas identified include the Blanco River, Lake Amon Carter, Lake Nocona, Lake Stamford, Hubbard Creek Reservoir, Llano River, and Boerne Lake.

Studying the recommended watersheds would give the State of Texas the information necessary to potentially assist 295,447 citizens of the state which suffered water use restrictions during last year's drought, evaluate brush control for 14 water supply reservoirs listed in the State Brush Control Plan, and potentially provide brush control assistance to landowners in 7 to 14 soil and water conservation districts.