TEXAS STATE SOIL AND WATER CONSERVATION BOARD
WATER SUPPLY ENHANCEMENT PROGRAM

2013 ANNUAL REPORT
JANUARY 1, 2013 – DECEMBER 31, 2013

PROGRAM PURPOSE

Primary Goal of the WSE Program

Enhance domestic and municipal uses, including water for sustaining human life and the life of domestic animals, agricultural and industrial uses, which means processes designed to convert materials of a lower order of value into forms having greater usability, commercial value, and environmental flows.

Secondary Goal of the WSE Program

Enhance mining and recovery of minerals, power generation, navigation, recreation and pleasure, and other beneficial uses.

PROGRAM BUDGET

FY2014	$2,135,413 General Revenue
FY2015	$2,135,413 General Revenue

2013 ACTIVITIES AT A GLANCE

TSSWCB WSE Program staff participated in a variety of activities and meetings in order to communicate and exchange ideas regarding the WSE Program. Staff has been actively working with the Texas Water Development Board to gather information on the water supply need for Texas, and has been collaborating with the Texas Department of Agriculture with respect to water yield enhancement.

To ensure the TSSWCB is targeting areas for WSE, the TSSWCB contracted with the Texas Tech University Water Resources Center and the United States Geological Survey to develop a set of criteria that will likely have the most profound and positive impact on water salvage while maintaining the ecological integrity of the landscape.

The TSSWCB also assembled a Science Advisory Committee to assess the overall effectiveness of the WSE Program, and to establish a process for funding feasibility studies.

WSE Program staff participated in ArcView training provided by Dr. Ernest Fish to gather new information and ideas regarding updated mapping systems.

A ranking system recommended by the Stakeholder Committee (Dr. Robert Mace, Texas Water Development Board) is the approach that the TSSWCB WSE Program staff will use for ranking projects. Essentially, there are six steps to consider when ranking potential projects:

- Step 1: Water supplies expected to be benefited by the project
- Step 2: Firm yield benefit to water supplies
- Step 3: Water User Groups (WUGs) relying on water supplies
- Step 4: Percent of augmented water supply used by WUGs
- Step 5: Population of WUG
- Step 6: Ranking Index (RI)

To meet the requirements of Texas Agriculture Code Section 203.053 Criteria for Accepting and Prioritizing WSE Projects, subsection (d)(2) projected water yield of areas of the project, based on soil, slope, land use, types and distribution of trees, brush, and other vegetative matter, and proximity of trees, brush, and other vegetative matter to rivers, streams, and channels; the WSE Program staff will digitize this information onto maps submitted with WSE Program applications.

STATUS REVIEWS

Scheduled Follow-up Treatment and Status Review Requirements

The State Board shall continue to require follow-up brush control treatment, at no cost to the State, in its WSE plans.

Status Review Schedule:

Status reviews will be conducted within three to five years after initial treatment of Mesquite, Mixed Brush, Juniper or Saltcedar to determine if the canopy is above 5%. A second status review will be performed eight to nine years after initial treatment.

Policy---If the producer is found out of compliance, he/she will not be eligible for another contract for a period of ten years.

Follow-up Treatment Scheduled in WSE Plan:

Mesquite, Mixed Brush, Saltcedar.....Follow-up treatment is scheduled 3 years after initial treatment if canopy is above 5%

Juniper.....Follow-up treatment is scheduled 8 years after initial treatment if canopy is above 5%

The WSE Contract states:

(2) follow up treatment is to be carried out as specified in an eligible person's WSE plan and status reviews will be conducted

The TSSWCB presents this annual report covering the 2013 calendar year. The 82nd Legislature continued funding for the WSE Program by providing $2,135,413 in General Revenue Funds in FY2013. Along with completing projects from FY2011 and certifying ongoing FY2012 projects, the WSE Program completed all 2013 project allocations in the following nine project areas:

- Edwards Aquifer(Sabinal and Medina),
- Guadalupe River Watershed,
- Lake Brownwood Watershed,
- Pedernales River Watershed,
- Gonzales County/Carrizo Wilcox, Aquifer
- Little Wichita River Watershed (Archer and Clay Counties), and
- Lake Nimitz/Upper Guadalupe.

Below is a table with compiled data regarding Predicted Water Yield on all FY2013 projects.

ANNUAL INCREASE IN WATER YIELD FOR FY2013

Twin Buttes Project

Acres	Target	Increase in Water Yield
2,561.0	Lake Nasworthy	64,096,708.0 gal

Population Served
City of San Angelo

Lake Brownwood Project

Acres	Target	Increase in Water Yield
1,285.0	Lake Brownwood	122,969,681.3 gal

Population Served
City of Brownwood and surrounding areas for industrial, agricultural, and municipal uses

Little Wichita Project

Acres	Target	Increase in Water Yield
2,729.7	Lake Arrowhead and Lake Kickapoo	442,306,939.5 gal

Population Served
City of Wichita Falls and surrounding areas for industrial, agricultural, and municipal uses

The Bosque Project

Acres	Target	Increase in Water Yield
206.0	Steel Creek that flows into Lake Whitney	5,370,024.5 gal

Population Served
City of Waco and surrounding areas

Ft Phantom Hill Project

Acres	Target	Increase in Water Yield
200.0	Elm Creek that feeds Fort Phantom Hill Reservoir	20,884,600.0 gal

Population Served
City of Abilene and surrounding areas

Palo Pinto Project

Acres	Target	Increase in Water Yield
132.0	Lake Palo Pinto	23,528,604.0 gal

Population Served
City of Mineral Wells and surrounding areas

Guadalupe Project

Acres	Target	Increase in Water Yield
254.0	Canyon Lake and Nimitz Lake	55,318,660.0 gal

Population Served
New Braunfels, San Marcos, and surrounding areas

Pedernales Project

Acres	Target	Increase in Water Yield
911.0	Lake Travis	198,406,690.0 gal

Population Served
Austin and surrounding areas

Edwards Aquifer Project

Acres	Target	Increase in Water Yield
600.0	Edwards Aquifer Recharge Zone	130,674,000.0 gal

Population Served
San Antonio metropolitan area

Frio River Project

Acres	Target	Increase in Water Yield
1,567.0	Choke Canyon Reservoir	114,478,752.0 gal

Population Served
Corpus Christi

Nueces River Project

Acres	Target	Increase in Water Yield
950.0	Choke Canyon Reservoir	69,403,200.0 gal

Population Served
Corpus Christi

Carrizo-Wilcox Guadalupe River Project

Acres	Target	Increase in Water Yield
57.0	Carrizo-Wilcox Aquifer Recharge Zone and Middle Guadalupe River	5,865,699.0 gal

Population Served
San Antonio area

O.C Fisher Project

Acres	Target	Increase in Water Yield
8,766.3	O.C Fisher Reservoir	228,520,609.7 gal

Population Served
City of San Angelo

Grand Total: Acres Treated and Cleared
20,219.0 acres

Grand Total: Increase in Water Yield (gallons)
1,481,824,168.0

Grand Total: Increase in Water Yield (acre-feet)
4,547.5