ELLIS-PRAIRIE SOIL AND WATER CONSERVATION DISTRICT WATER QUALITY PROJECT

FINAL REPORT
TSSWCB PROJECT 05-03

ELLIS-PRAIRIE SOIL AND WATER CONSERVATION DISTRICT

FUNDING PROVIDED THROUGH A CLEAN WATER ACT §319(h) NONPOINT SOURCE GRANT FROM THE TEXAS STATE SOIL AND WATER CONSERVATION BOARD AND THE U.S. ENVIRONMENTAL PROTECTION AGENCY

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INTRODUCTION

Richland and Chambers Creeks Watershed is located in Ellis, Hill, Johnson, Limestone, and Navarro counties. The drainage area comprises of approximately 1,261,299 acres. Of this amount 340,550 acres is located in the Ellis-Prairie Soil and Water Conservation District (SWCD). Lake Waxahachie, Bardwell Reservoir, Richland Chambers Reservoir, and Lake Navarro Mills are located within the Richland and Chambers Creeks Watershed. These lakes supply drinking water for approximately 1.6 million people in North Central Texas.

The Richland and Chambers Creeks Watershed area is an important farming area in North Central Texas. Major crops include, cotton, corn, grain sorghum, and wheat. Pasture grasses, especially improved bermudagrass, are important agronomic crops in this area.

In November 2000, the Ellis-Prairie SWCD and the Texas State Soil and Water Conservation Board (TSSWCB) initiated a project to develop and implement Water Quality Management Plans (WQMP) to reduce Atrazine runoff into Lake Waxahachie, Bardwell Reservoir, and Richland Chambers Reservoir. In August 2005, this project was initiated to address sediment, nutrient, and pesticide runoff into the 4 main public surface water supplies (Lake Waxahachie, Bardwell Reservoir, Richland Chambers Reservoir, and Lake Navarro Mills) in the Richland and Chambers Creeks Watershed.

The Ellis-Prairie SWCD employed a technician to execute all components of the project. The duties of the technician included providing technical and financial assistance to agricultural producers to develop and implement WQMPs.

PROGRAM DEVELOPMENT

In August 2005, a new project was initiated to address sediment, nutrient, and pesticide runoff in the 4 main public surface water supplies in the Richland and Chambers Creek Watershed.

The Ellis-Prairie SWCD employed a technician to execute all components of the project. The duties of the technician included providing technical and financial assistance to agricultural producers to develop and implement WQMPs.

The Ellis-Prairie SWCD and the technician identified eligible farms in the project area. Announcements were printed in the Ellis County Farm Newsletter published by the USDA/ Farm Service Agency. Additionally, the technician developed a list of potential applicants using information from the Farm Service Agency records.

The Ellis-Prairie SWCD set the following priorities to fund applications for cost share assistance:

<u>High Priority</u>
All agricultural land needing treatment to reduce sediment and/or nutrient/pesticide runoff.

Practices included but were not limited to:

Buffers
Conversion of cropland to grassland
Critical area treatment
Erosion control structures
Terraces
Waterways

<u>Low Priority</u>
Grasslands needing treatment to improve plant health and/or control the invasion of woody vegetation.

Practices included but were not limited to:

Reseeding rangeland
Rangeland converted to pastureland
Brush management
Livestock water (pond, pipeline)

PROJECT ACCOMPLISHMENTS

Ellis County Crops Tours were conducted annually. During the tours, producers viewed BMP demonstrations and received information on the Ellis-Prairie SWCD Water Quality Project.

Thirty-eight potential applications were received through this project. Twenty-five applicants implemented WQMPs approved by the TSSWCB.

Through the development of 25 WQMP's using BMP's such as grass establishment, critical area shaping, and management practices, sediment loading in the Richland/Chambers Watershed was reduced by 7,409 tons.

PROJECT ACCOMPLISHMENTS BY TASK

TASK 1: Program Coordination with project Participants

Costs: $87,800 (federal), $4,500 (Non-Federal), $92,300 (Total)

Objective: To foster coordinated technical assistance activities in the Richland and Chambers Creeks Watershed between the TSSWCB, NRCS and Ellis-Prairie SWCD.

Subtask 1.1 The Ellis-Prairie SWCD will hire a planner who will coordinate and carry out the project.

The technician that was employed by the Ellis-Prairie SWCD to coordinate the previous Atrazine Remediation Project was assigned to oversee the new project in August 2005. After his resignation, a new technician was employed in May 2006 to complete the project.

Subtask 1.2: Meet monthly with to inform district to discuss technical and financial assistance activities.

The technician attended the Ellis-Prairie SWCD board meetings conducted on the second Monday of every month and briefed the directors on project activities.

Subtask 1.3: Coordinated with other agencies and programs providing landowners incentives for adopting Best Management Practices.

The technician coordinated with the Natural Resource Conservation Service (NRCS), Farm Service Agency (FSA) and Texas Agrilife Extension Service to promote program and educate landowners.

Subtask 1.4: Prepare quarterly reports and a final report for submittal to the TSSWCB.

The SWCD technician has completed all quarterly reports. Materials were provided to cooperators and participants as needed. The Final Report has been submitted to TSSWCB.

TASK 2: Water Quality Education on Best Management Practices to Reduce Runoff.

Costs: $2,000 (Federal), $0 (State), $2,000 (Total)

Objective: To promote the implementation of cost effective BMPs that reduce runoff by informing and educating producers about appropriate BMPs.

Subtask 2.1 Cooperate with NRCS, TAEX, and Texas Department of Agriculture Provide 1 educational/training event describing methods for reducing runoff.

The technician participated in annual crop tours to provide education and training regarding methods for reducing agricultural nonpoint source pollution. The technician also participated in the NRCS local work group meetings (annually) and the Annual Lawn and Garden Expo at Waxahachie Civic Center to provide educational materials to interested landowners.

TASK 3: Development and Implementation of WQMPs

Costs: $300,000 (Federal), $300,000 (Non-Federal), $600,000 (Total)

Objective: To provide technical assistance to landowners in developing and implementing WQMP's within the Richland and Chambers Creeks Watershed.

Subtask 3.1: The SWCD planner will develop approximately 30 WQMPs within the Richland and Chambers Creek Watershed. The SWCD Planner will complete all WQMPs with assistance from the NRCS as needed.

38 applications for assistance were received. 25 WQMPs were developed and approved by the TSSWCB regional office in Dublin.

Subtask 3.2: The SWCD planner will send out notification announcing the availability of assistance for implementing WQMPs, and will assist the Ellis-Prairie SWCD in accepting and prioritizing the WQP applications.

Announcements were made in the Farm Service Agency (FSA) newsletter and local newspapers. SWCD planner assisted the SWCD in accepting and prioritizing WQMP applications.

Subtask 3.3: The planner, with assistance from NRCS and the TSSWCB Dublin Regional Office, will provide landowners with information on appropriate best management practices and will work with landowners in developing and implementing WQMPs with the Richland and Chambers Creek Watershed.

25 WQMP's were developed and submitted to the TSSWCB Dublin office. Landowners were provided with information on best management practices and implementing WQMP's.

Subtask 3.4: TSSWCB Dublin Regional Office will provide technical review and certification of WQMPs.

All 25 WQMPs were approved and determined to meet technical standards and meet program criteria.

Subtask 3.5: The SWCD planner will conduct status reviews of all WQMPs to ensure BMP implementation schedules are being followed.

The SWCD technician conducted status reviews on all WQMP's to ensure implementation schedules were being followed.

TASK 4: **Compilations of WQMPs implemented in the Richland and Chambers Creek Watershed.**

Costs: $43,900 (Federal), $0 (Non-Federal), $43.900 (Total)

Objective: To compile information of the location and types of BMPs for each WQMP implemented in the Richland and Chambers Creek Watershed.

Subtask 4.1: The Planner, with assistance from NRCS, the TSSWCB Dublin Regional Office and the SWCDs will compile information on the location and types of BMPs for each WQMP implemented within the Richland and Chambers Creeks Watershed.

A spreadsheet containing the location and types of BMP's for each WQMP implemented are included in this report.

Appendix A

Inventory of Cost Shared BMPs