

**Technical Assistance and Implementation in the West Fork of the Trinity
River Watershed**

TSSWCB Project 04-07

Final Report

JACK SOIL & WATER CONSERVATION DISTRICT



USDA-Natural Resources Conservation Service
Jacksboro, Texas

TSSWCB Regional Office
Dublin, Texas

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

Introduction

The Upper West Fork of the Trinity River watershed (above Lake Bridgeport) is located in Archer, Clay, Jack, Montague, Parker, Tarrant, Wise, and Young counties. This segment is directly above Lake Bridgeport reservoir and Lake Amon G. Carter. The towns of Jacksboro, Bowie, and Runaway Bay are all included in the Upper West Fork watershed above Lake Bridgeport. The section is approximately 85 miles long and used primarily for contact recreation, fish consumption, and public water supply. Stream segment 0812 above Lake Bridgeport, is currently impaired due to total dissolved solids (TDS) and depressed dissolved oxygen.

Of the Upper West Fork watershed, a large portion lies in Jack County. Jack County itself has a land area of 921 square miles, approximately 589,132 acres. The majority of this land, approximately 89.2% (525,729 acres) was classified as rangeland in 1998. (Jack County Soil Survey).

In February 2005, the Jack Soil and Water Conservation District (SWCD) received a Clean Water Act (CWA) Section 319(h) Nonpoint Source (NPS) Grant from the Texas State Soil and Water Conservation Board (TSSWCB) to provide technical and financial assistance for the development and implementation of water quality management plans (WQMPs) in the drainage area of segment 0812 of the Upper West Fork of the Trinity River above Lake Bridgeport. Best management practices (BMPs) are implemented according to a certified WQMP to reduce or abate agricultural or silvicultural NPS pollution loading.

The Jack SWCD provided technical assistance to ten landowners within the West Fork of the Trinity River watershed to develop and implement WQMPs. The SWCD hired a Technician to provide 100% effort in developing and implementing WQMPs. Technical assistance was provided by the local SWCD because it allows for greater local buy in or support from local landowners in the implementation of WQMPs.

The objective of WQMPs and BMP implementation is to achieve a level of NPS pollution prevention or abatement determined by the State Board in consultation with the local SWCD to be consistent with water quality standards.

The Jack SWCD determined which landowners would receive technical assistance for the development and implementation of WQMPs based on a two-tier system. The two tier system consist of the following, 1st priority dryland cropland and 2nd priority range and pastureland. The tier system was used in prioritizing landowners that will implement practices to help in the remediation of the impaired segment. Landowners that are dryland cropland producers that implement practices such as terraces, grass waterways and filter strips received the highest determination for BMP implementation. Landowners who are range and pastureland producers that implement practices such as critical area planting, fencing, range and pasture planting and brush management will received a lower determination for BMP implementation. By using this tier system the project funded producers that implement the most effective BMPs to reduce TDS within the impaired segment..

Once a landowner submits a request for a WQMP, the district reviewed the request and assigned it a priority and number. After the district approved the producer's request, the technician worked with the landowner to develop the WQMP. WQMPs that were developed were done according to the Natural Resource Conservation Service (NRCS) Field Office Technical Guide (FOTG).

PROJECT ACCOMPLISHMENTS BY TASK

Task 1: Program Coordination and Management

Objective: Organize an integrated team among the multiple agencies and groups involved with the project to efficiently and effectively achieve project goals.

Subtask 1.1: The Jack SWCD, will hire a technician to provide technical assistance to producers and develop WQMPs.

- **A Technical Service Provider was hired by the district to write the WQMPs for the project.**

Subtask 1.2: Prepare quarterly and final reports. The final Report will be submitted to the TSSWCB, via CD, at the culmination of the project. The TSSWCB project manager will set dates for the reports.

- **Quarterly reports were submitted each quarter during the project. The final report was submitted to the TSSWCB.**

Subtask 1.3: Attend monthly SWCD board meetings to discuss technical assistance activities, project schedule, lines of responsibility, communication needs, and other required tasks with project participants.

- **The Technician attended all district board meetings to give project status updates and to get district approval of WQMPs and cost-share payments.**

Task 2: Development and Implementation of WQMPs

Objective: Encourage agricultural landowners to comply with state water quality laws through a traditional voluntary based incentive program and assistance to producers in developing and implementing WQMPs.

Subtask 2.1: The Jack SWCD, will prioritize the WQMP applications and rank landowners based on greatest need of BMP implementation.

- **Ten requests for planning assistance were received from producers within the watershed.**

Subtask 2.2: The SWCD technician will provide landowners information on appropriate BMPs and will work with the TSSWCB Regional Office in developing and implementing WQMPs.

- **The technician worked with each producer to select the BMPs to implement on their land which will reduce NPS pollution from entering the stream.**

Subtask 2.3: The Jack SWCD technician will develop approximately 10 WQMPs. The SWCD technician will complete all WQMPs with assistance from the NRCS, and the TSSWCB Regional Office as needed.

- **The technician developed 10 WQMPs.**

Subtask 2.4: The TSSWCB Dublin regional office will provide technical review and certification of WQMPs. During this process, The TSSWCB Dublin regional office will certify all WQMPs and ensure that they are consistent with state water quality standards.

- **The TSSWCB Dublin Regional Office reviewed and certified 10 WQMPs.**

Subtask 2.5: The SWCD technicians will conduct annual status reviews on all WQMPs developed to ensure that the implementation schedule is followed and funds are properly administered.

- **Annual status reviews were conducted on all WQMPs.**

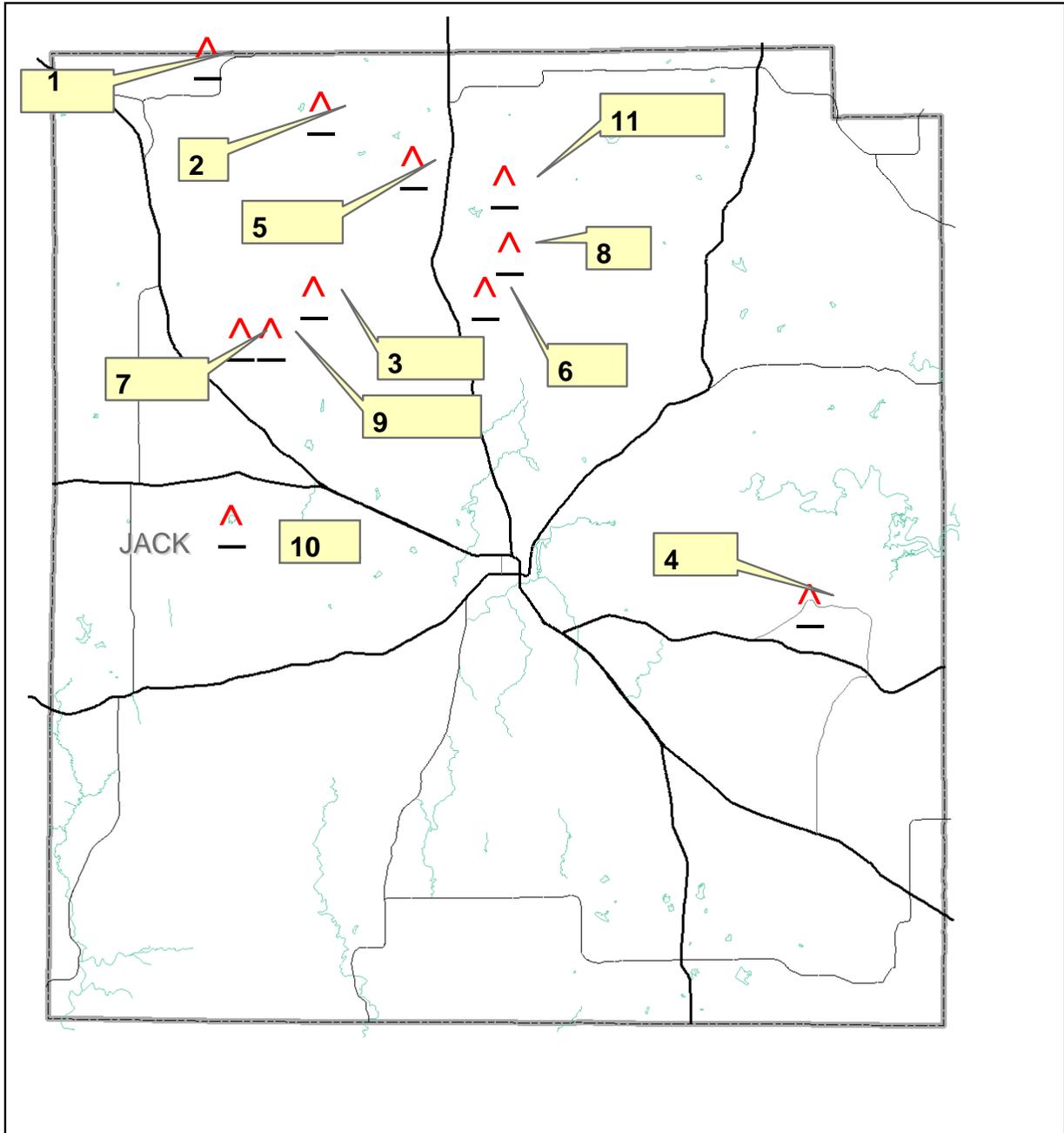
Task 3: Mapping and Itemized listing of the location and types of BMPs.

Objective: To compile and document locations and types of BMPs implemented

Subtask 3.1: The technician will compile information on the location, numbers, and types of BMPs implemented within the watershed.

- **A map was developed showing the location of the WQMPs developed and implemented through the project.**
- **A spreadsheet was developed showing the BMPs implemented through each WQMP.**

WQMP Location within watershed



BMP's Implemented in the Watershed



Brush Management was done on 694 acres within the watershed. In areas where brush has overtaken rangeland grass is prohibited to grow increasing sediment runoff.



Native seeds were planted to provide proper vegetative cover on the land. This will prevent excessive soil and water loss, improve water quality, produce more forage for livestock, and restore historic plant communities.



Range planting was implemented on 745 acres providing native grasses to reduce sediment runoff into nearby streams.



In helping to ensure that proper grass cover is maintained, prescribed grazing was applied on approximately 4700 acres.



Alternative water facilities provide watering for livestock and/or wildlife. Livestock ponds help to reduce sediment runoff by protecting environmentally sensitive riparian areas.