

**Water Quality Management Plan Implementation Assistance
for**

Johnson County Soil and Water Conservation District

Final Report

For

Richland Chambers Creek Watershed – Project 319

Contract # 99-03

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Introduction

The Richland Chambers Reservoir is listed as threatened by atrazine on the 1999 State of Texas 303(d) list. This lake is an important drinking water supply located in Corsicana, Texas. The Richland/Chambers watershed supplying this water supply reaches northward into Johnson County. County seat located in Cleburne, TX. To remove this threat, the Texas State Soil and Water Conservation Board worked cooperatively with the Johnson County Soil and Water Conservation District (SWCD), Natural Resources Conservation Service (NRCS), Texas Agricultural Extension Service (TAEX), Texas Department of Agriculture, and Texas Agricultural Experiment Station (TAES) to provide water quality education, BMP demonstration, technical assistance, and financial assistance to agricultural producers which promote the implementation of BMPs to reduce the runoff of atrazine.

Best management practices to reduce the runoff of atrazine were implemented through the development of Water Quality Management Plans (WQMPs). The objective of WQMP implementation was to achieve a level of pollution prevention or abatement determined to be consistent with State water quality standards. Highest priorities were given to the implementation of cost-effective pollution abatement practices. TSSWCB and SWCDs determined which landowners receive technical assistance for development and implementation of WQMPs. BMPs, for Johnson County SWCD included:

- Integrated pest management,
- Terraces and grassed waterways,
- Conversion of cropland to grassland, &
- Other Conservation control practices (e.g., brush management, cross fencing, water well installation, pipeline installation, watering troughs)

Project Summary

The Atrazine 319 Remediation project officially began in Johnson county in January 2000. A technician/planner was hired as the project planner in October 2000. Beginning January of 2001 the Johnson County SWCD announced the program via the local media. That month we received our first sign up for the program. At first the program got off to a slow start. Much like any attempt to start a business. Six months into the program the training and experience were starting to pay off. The spring of 2001 was considerably a wet planting season. The late start along with wet conditions made it almost impossible to accomplish the program practices for that year. However, the next year planning and implementing went very well. In the fall of 2002 a time extension for the 319 project was requested by the Johnson County SWCD. Which would extended the project to December 2003. The project was granted the extension and several additional WQMPs were able to be planned and implemented by the end date.

In Johnson County overall participation in the Atrazine Remediation project exceeded our expectations. Originally we anticipated only writing 30 WQMPs. Overall there were 60 individuals who signed up for with conservation needs. Of which 46 WQMPs developed. However, due to unexpected situations, weather, death in families, inexperienced agricultural land owners, September 2002, job lay offs, and clarity in communication, only 35 WQMPlans were implementend. There were 12 cancelations. Of which two land owners did not respond to any calls letters or other attempts to communicate. Now three years later 46 producers were assisted in the development and 35 producers with implementation of their WQMPs. These producers by using the SWCD & NRCS technical assistance and conservation planning were educated about agricultural practices, procedures, and conservation of soil, water, fertilizer, and herbicides on their land.

To this day the Soil & Water Conservation District along with NRCS is still receiving calls regarding the 319 program. Many of which questions are related to fertilizer, soils test, and herbicides. We feel the project has obtained a good amount of publicity and has educated those individuals who were willing to cooperate and learn together as our science and technology moves at rapid speeds ahead of us. The next pages in this report give a brief look at activities and information that occurred during this three year time frame. Of which there is a quarter report showing activities accomplished during a three month period. News articles and letters advertising the program, sign in sheet of attendance at educational meeting, training meeting announcement, a example of a quarterly report, location map of WQMPs in the county, inventory sheet of practices cost shared, and project photos.

Appendix A:

- ✓ Program development workshop announcement
- ✓ News letter sent out by Johnson County SWCD to individual producers with approved practices
- ✓ News article printed by Grandview Tribune announcing program
- ✓ 5- hr. CEU Training with Atrazine informative program scheduled

Atrazine Remediation in Texas Waterbodies

Tuesday - February 15, 2000

6:00 p.m. - 8:30 p.m.

Cleburne Civic Center

6:00 p.m. Registration

6:30 p.m. Introductions.....Jack Moore, Chairman,
Johnson County Soil & Water Conservation District

Program Introduction....Andy Spencer
Natural Resources Conservation Service

Water Quality Testing

Ken May, Texas Natural Resources Conservation Commission

Best Management Practices's (BMPs) for Atrazine Control

Dr. Paul Baumann, Texas Agricultural Extension Service

Total Maximum Daily Load (TMDL) Process

Kevin Wagner, Texas State Soil & Water Conservation Board

USDA-NRCS Cost Share Programs and
Local Action Team Formation

Andy Spencer, Natural Resources Conservation Service

8:30 p.m. Questions and Adjourn

2 CEU
Pesticide Applicators Credits
Offered During the Program

The workshop and dinner are free of charge. Pre-registration is required to ensure an adequate amount of food is prepared. For more information, contact: NRCS-Stan Ellison (817)645-7711 ext.3 or Johnson County Extension Office-Roy Russell (817) 556-6370. To R.S.V.P. contact (817) 556-6370 NO LATER THAN FEBRUARY 8.

This program is co-sponsored by Johnson County Soil & Water Conservation District and Texas Agricultural Extension Service. Dinner provided courtesy of Johnson County SWCDt.



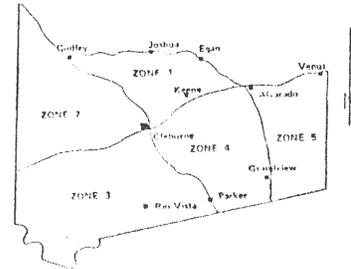
JOHNSON COUNTY SOIL AND WATER
CONSERVATION DISTRICT NO. 541
PROJECT 319

103-B Poindexter
Cleburne, Texas 76031

January 9, 2001

RE: Sign-up Date for Project 319

To: Agricultural Landowners and Producers
In Johnson County
Watersheds Joe Pool and Richland Chambers



The Johnson County Soil and Water Conservation District (SWCD) #541, and its Board of Directors, would like to invite you to sign up for a special program that is available for agriculture producers in the Richland Chambers Watershed. Both technical and financial assistance are available for you. The Cost-share assistance rate has been set at 75%. The program is designed to *provide assistance on Conservation Practices* such as *Waterways, Filterstrips, Terraces, Converting Cropland to Grass, Grade Stabilizations, and Others*. These practices will help reduce Atrazine in water supplies. Priorities have been established for the approved practices.

If you have received this letter notifying you of the project then you either own, or operate, land within the Richland Chambers Watershed. *Now is the time to Sign-up for the voluntary program.* If you have further questions, or would like to sign-up for cost-share assistance, please contact David Frederick, calling 817-645-7711-ext. 3. *Sign-up Deadline is February 15th, 2001.*

Sincerely

M.J. Moore
Board of Directors Chairman

David Frederick
Project Planner

817-645-7711-Ext. 3
Fax 817-641-7426
david.frederick@tx.usda.gov



CONSERVATION APPROVED PRACTICES

- High Priorities -** Pasture and Hayland Planting (512)
Filter Strips (393)
Terraces (600)
Grade Stabilization Structure (410)
Grassed Waterway or Outlet (412)
Range Planting (550)
- Medium Priorities-** Ponds (378)
Brush Management (314)
Critical Area Planting (342)
Nutrient Management (590)
Pest Management (595)
- Low Priorities-** Diversions (362)
Fencing (382)
Waste Management System (312)
Waste Storage Facility (313)
Pipeline – Installed (516)
Trough or Tank (614)
Underground Outlet – Waste Transfer Pipeline (620)
Wells – Livestock distribution (642)
Use Exclusion (472)

FARM & RANCH



David Frederick was recently employed to coordinate an Atrazine remediation project sponsored by the Johnson County Soil and Water Conservation District and the USDA Natural Resources and Conservation Service. He will be working out of the NRCS office in Cleburne. The Project is designed to increase the use of best management practices to reduce the amount of sediment from cultivated fields which reaches creeks and streams. Cost share is available to qualifying cropland farms in the Joe Pool, Chambers, and Aquilla watersheds.

Atrazine Remediation Project

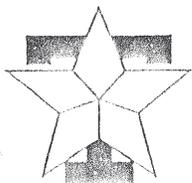
Local officials continue to work with state and federal agencies to develop a plan to keep levels of the herbicide Atrazine from exceeding maximum allowable levels in Aquilla, Rickland-Chambers, and Joe Pool Lakes. These lakes are sources of drinking water for many communities and water supply corporations. This herbicide is used to control weeds in corn and other crops.

An EPA grant was secured through the Texas State Soil and Water Conservation Board. A portion of this grant will fund the Atrazine remediation project in Johnson County and will attempt to increase best management practices in the Chambers, Aquilla, and Joe Pool watersheds to prevent Atrazine and other chemicals from ever reaching the water source.

David Frederick of Johnson

County is currently attending training. He will office at the USDA-Natural Resources Conservation Service in Cleburne. David will be identifying farms where grassed waterways, filter strips, terraces, buffers, grass planting, grade stabilization and/or sediment practices could help reduce the amount of chemicals reaching creeks and streams that empty into area lakes. He will offer technical assistance to producers to prepare Water Quality Management Plans. Cost share Contracts will be offered to qualifying farms at a 75 to 25% cost share rate. The first Water Quality Management contracts are not expected to be awarded until the spring.

For more information on the Atrazine remediation project, contact the NRCS or Johnson County SWCD at 817-645-7711 Ext 3.



Texas Agricultural
Extension Service

5-hr. CEU TRAINING

Wednesday - December 6, 2000 - 8 am-3 pm
New Hill College Campus-Cleburne
Rm. 200, Instructional Bldg., Bus. 67 & Mayfield Pkwy

8:00 a.m.....	Registration
9:00 a.m.....	"TDA Laws & Regulations" - Mark Evans and Vic Alexander, TDA
10:00 a.m.....	"Aquatic Weed Control" - Dr. Michael Masser, Fisheries Specialist
11:00 a.m.....	"Atrazine Program" - David Frederick, NRCS Representative
12:00 noon.....	LUNCH
1:00 p.m.....	"Grasshoppers & Armyworms" - Bill Buxkemper, CEA-AG/Hill Co
2:00 p.m.....	"Sprayer Calibration" - Dr. Paul Baumann, Weed Specialist
3:00 p.m.....	Adjourn

Credits - 5 hrs. Total

- ✓ 1 hr Laws & Regulations
- ✓ 1 hr IPM
- ✓ 1 hr Drift Minimization
- ✓ 2 hrs General

Cost: \$30.00/each

(includes lunch, refreshments & materials)

Individuals with disabilities who require an auxiliary aid, service or accommodation in order to participate in this meeting are encouraged to contact us to determine how reasonable accommodations can be made. Extension programs serve people of all ages regardless of socio-economic level, race, color, sex, religion, disability or national origin.

-----DETACH HERE-----

-----DETACH HERE-----

5-HR CEU REGISTRATION FORM

PRINT NAME _____ PHONE (____) _____

ADDRESS _____ CITY/STATE/ZIP _____

COUNTY _____ AMOUNT ENCLOSED _____

DUE NO LATER THAN DECEMBER 4, 2000

PLEASE MAKE CHECKS PAYABLE TO:

DISTRICT 8 TCAAA

MAIL REGISTRATION & MONEY TO:

Roy Russell, CEA-AG
Johnson County Extension Office
2 Main St., Suite 309
Cleburne, TX 76031

Appendix B:

- ✓ Sign in sheet of attendance at educational meeting

Conservation Informative Program Attendance List:
 February 5th, 2002
 LaFiesta Restraunt - Cleburne, TX
 7:00 PM

	Name	Address	City	State	Zip
1	JIM TINSLEY				
2	Paul Murphy				
3	Laurel Pickler				
4	Garrett Duff				
5	Jack Fry				
6	John Dandridge				
7	Nancy Martin				
8					
9					

Conservation Informative Program Attendance List:
 February 5th, 2002
 LaFiesta Restraunt - Cleburne, TX
 7:00 PM

	Name	Address	City	State	Zip
1	Pete Haerle				
2	Brice Nelson				
3	JAMES M. FOLLARD				
4	Earlene Dandridge				
5					
23					
24					

Appendix C:

- ✓ Training meeting announcement



TEXAS STATE SOIL AND WATER CONSERVATION BOARD

311 North 5th Street
P.O. Box 658
Temple, Texas 76503-0658
(254) 773-2250
Fax (254) 773-3311

319(h) Atrazine Technician Meeting **Tuesday July 24, 2001** **10:00 - As Needed**

Agenda

1. Introductions of technicians 10:00 - 10:15
2. Individual reports 10:15 - 11:30
3. Discussion of working agreement between SWCDs and NRCS 11:30 - 11:45
4. Role of NRCS to SWCD technician 11:45 - 12:00
5. Lunch (on your own) 12:00 - 1:00
6. Surface Water Protection Committee Meetings 1:00 - 2:00
7. Annual Nonpoint Source meeting in Dallas 1:00 - 2:00
8. Field Visits with EPA 1:00 - 2:00
9. Final Reports 1:00 - 2:00
10. Maps of WQMP progress 1:00 - 2:00
11. Training on WQMP/question answer session 2:00 - ?

Appendix D:

- ✓ A example of quarterly reports

Report for FY 03 3rd Quarter

April 1, 2003 - June 30, 2003

FY 99 CWA Section 319(h) Project
TSSWCB Project No. 99-03

**North Central Texas Atrazine Remediation Project for
Johnson County - Richland Chambers Watershed**

July 15th, 2003

Overall Status: Major project activities during this period included maintaining the developed databases for reporting and management of WQMPlans progress. Regular Activities included scheduling appointments with producers and prospective applicants requesting WQMPs. After visiting with applicants, discussion with NRCS engineers and conservationist of the BMPs that best suit the applicants goals and objectives of the WQMPlans. Daily activities consist of conversations with producers on problems and concerns for this years weather and environmental related issues with agricultural. Continued training and assistance on development and implementations on how WQMPlans are to be dealt with on a yearly and annual basis to David Frederick, Stan Ellison, Steve Jones and the TSSWCB Staff at Dublin Regional Office. Also another major activity included Technical engineering practice training activities for the implementation of WQMPlans BMPs. Programs aiding in the implementations are Arcview, DNR Garmin Map76, RUSLE (soil erosion) calculations and Watershed drainage area calculations on EFM2 and WWCAl. A total 5 WQMPlans developed for this quarter. A total of 36 for the JCSWCD thus far in the 319 program. Of these thirty six plans at this time all have been approved and certified. Project end date approaching so time extension has been requested. Accidental fire hazard with Dodge truck encountered in June. Insurance and all damages have been take care of. Board of Directors elections for two new board members has been the topic of discussion at the past few board meetings.

Upcoming Activities: These will include implementing BMPS and seeing that producers follow through with the WQMPs agreed to. Additional WQMPs will be developed and meetings with perspective applicants at their property will be scheduled and kept. More WQMPs will be sent to Dublin for approval. Additional WQMPlanning training, and conservation technical training will continue. Daily regular record keeping of cost share dollars and databases on status of WQMPs will be filled in and maintained. Monthly board meetings will continue and presentations of the Project 319 progress, achievements, and assistance available will be given to, but not limited to, committees and agencies. Understanding soils analysis and fertilizer recommendations coarse/program is being tentatively planned with the JCTAE agent. Technical training on certifying practices is scheduled for the Month of August. Continued training on supervising and overseeing technical installations of BMPs will continue as well.

3rd Quarter Report for FY03		North Central Texas Remediation Project - Johnson Co. Richland Chambers	TSSWCB Project #00-03
Task	Deliverables & Subtask	3rd Quarter Activities FY 2003	Completion Status (%)
1	1.1		
	3 - Monthly District Board of Directors Meetings, Progress Reporting, Monthly Reporting, Training, Assistance to NRCS, Computer Programming & Diagnostics	As of 4/01/02 Included: ^Time Log sheet setup and calculations revised and made via state board instructions, ^Monthly reporting sent to Temple, Office Administration for field equipment status of repairs, Office Administration on in office maintenance's. As of 5/01/02 included: Preparations for board meetings, Monthly Reports for board of directors meetings, Holidays observed, Office staff conference on weeks workload, GPS Training in Corsicana, Staff Conference on upcoming board meeting items, Mapping assistance for TCU Range management in Johnson County, Leave without pay calculations and issues discussed for revision. As of 6/01/02 included: Reports given at board meetings to board of directors, Letter development for time extension & budget revision, GPS soil site evaluation training, CPU problem diagnostics, GPS in field training & setup with office computers.	75%
	1 - Meetings with State Office Program Managers from Temple	As of 6/01/02 Included: Developing databases to aide in Monthly reporting process, Daily Log ins of data important for the reporting each month.	75%
	1.2		
	Preparing Quarterly reports for FY01 & FY02, Field Notes Dictation, Cost-Share File updates & log-ins.	As of 7/3/01 included: Developing database files to aide in the Quarterly reporting process, Updating Quarterly reports, Revising Costshare database for Quarterly Reports, Updating excel spreadsheet files for reporting, Preparing and sending quarterly reports to Temple office, PNI notation updates for WQMPlans status, WQMPlan financial status updates and file maintenance.	75%
2	2.1		
	Educational/Training Events, 'Commitments from speakers(i.e.: Ext. Agents, Engineers, Agronomist)	Activities included as of 1/01/02: preparations for Kiwana's club presentation, Borrowing and returning of presentation items, Dalworth SWCD 319 and Extension Program Meeting, Educational Event planning w/ Extension Agent	50%

3rd Quarter Report for FY03		North Central Texas Remediation Project - Johnson Co. - Richland Chambers	TSSWCB Project #00-03
Task	Deliverables & Subtask	3rd Quarter Activities FY 2003	Completion Status (%)
	2.2		
	Scheduled meetings & discussion of appropriate BMP measures, 4 potential producers for WQMPIns	Site evaluation of needed terraces for new WQMP prospect, Setup of Appointments for WQMPlanning, Soil Samples searched for R.& J. Leonard, Meeting w/ landowner discussing conservation needs and 319 program	85%
3	3.1		
	Technical Assistance to Producers, Includes technical assistance to customer walk-ins & government agencies(I.E.: EPA)	WQMPlanning completions on nutrients required based on soils test, Customers Assisted w/ implementations and WQMPlanning, Erosion concerns addressed , Calculations on soil loss, Erosion assistance, Technical Assistance on WQMPlan implementations including: delivery of seeds, flood zones assessment, Cubic feet per second calculations, and drainage area and size. T A for customer wanting to identify reparation area, Assessment and inspection of grass , establishment,	65%
	3.2		
	Notifying Public of available programs	As of 1/01/02 Included: Receiving phone calls and walk-ins with questions regarding any cost-share programs available. Organizing and reorganizing sign up list based on priorities setup by the District and practices that could possibly be carried out in 2002-2003 calendar years.	90%
	3.3		
	At Least 7 Actual Meetings with different cooperators discussing BMPs and development of WQMPs	Included as of 6/10/02 scheduled and kept meetings with producers several times to completely review expectations and planning ideas for conservation work. Details were worked out as more communication continued over the phone with landowners and contractors.	90%

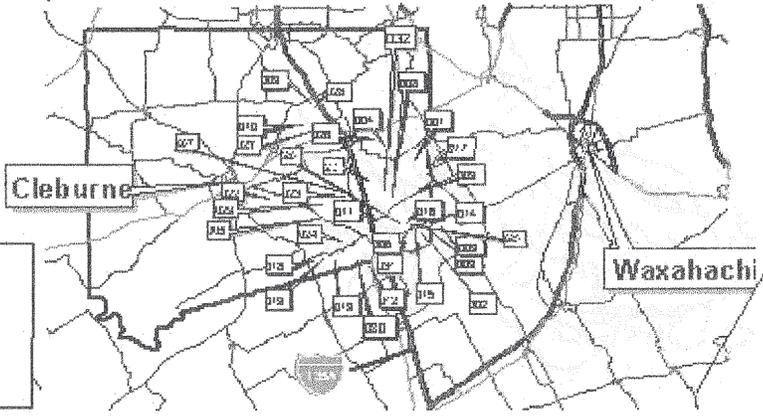
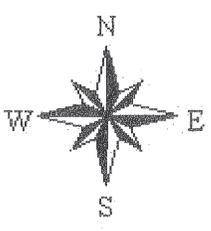
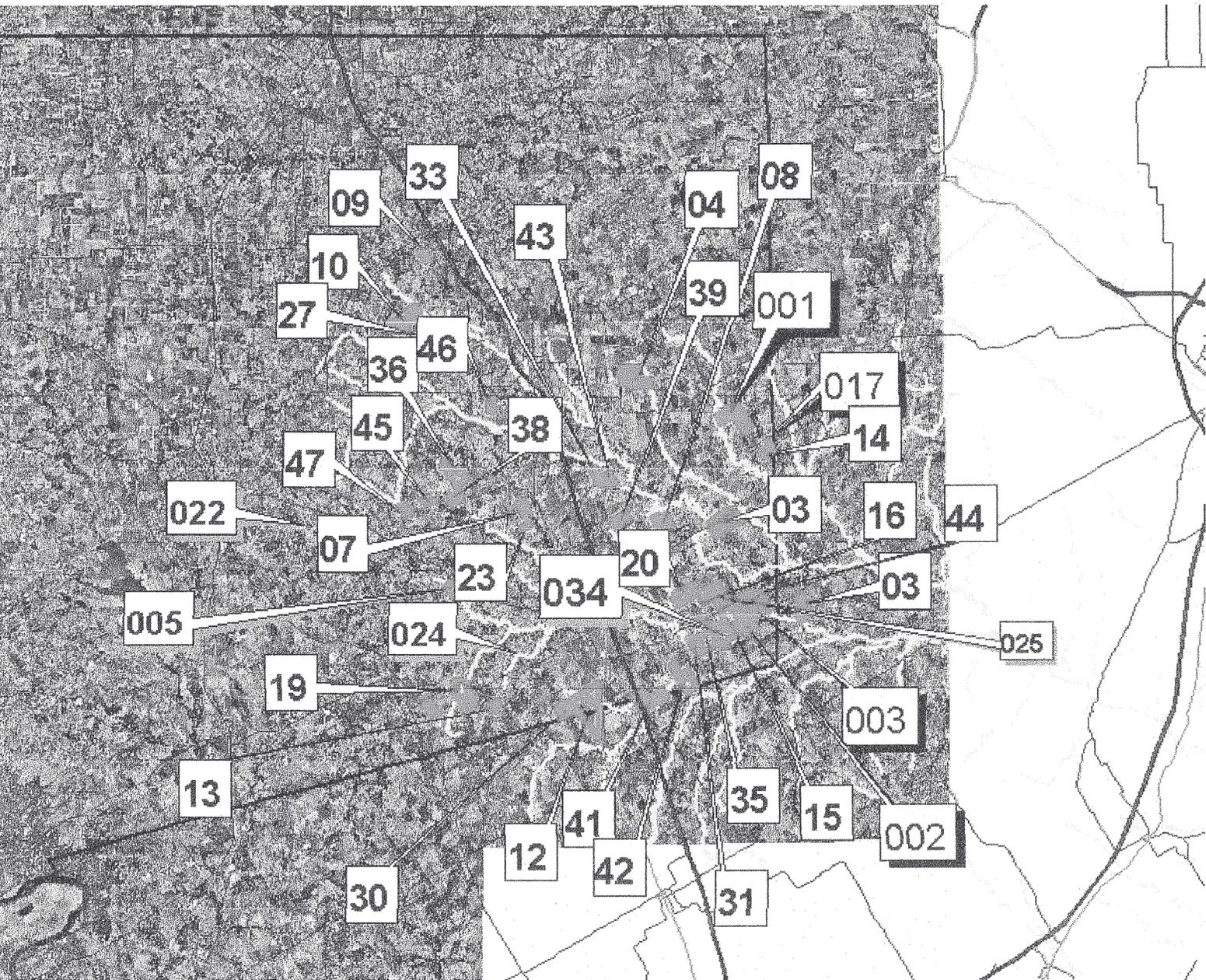
3rd Quarter Report for FY03		North Central Texas Remediation Project - Johnson Co. - Richland Chambers	TSSWCB Project #00-03
Task	Deliverables & Subtask	3rd Quarter Activities FY 2003	Completion Status (%)
	3.4		
	Plans Developing, Assistance w/ Planning steps & procedures, Certifying & Signing of Forms for Plans, Including Check-ups/Follow-ups on Work being done and Implementations.	Follow up on 11 plan(s), Assistance w/ 4 producer(s) on fertilizer & grass seeding implementations, General plan implementation assistance to 11 producers on procedures and next steps to be taken, 13 WQMPlans general development steps taken in office as administrative & development work, 7 Meeting(s) with producer(s) on finalizing, signing, and approving WQMPlans, Consultation on \$ amounts being paid on WQMP, Discussions on soils analysis & fertilizer miscommunications, Soils Tests initiated for the planning purposes, Reviews of developed plans, Arrangements for meetings to stake and preview pond locations.	65%
	3.5		
	Work being completed, Including WQMPlans BMP(s) being certified as completed. Meeting w/ producers regarding completions.	Performance certifications sent to Dublin on 11 WQMPlan(s), 15 Meeting(s) w/ producers & contractors on completing BMP(s), Setup to certify acreage cleared and planted with GPS 4 Plan(s), GPS downloading information and reviews for certification purposes.	65%
	3.6		
	Submission of 6 WQMPs to TSSWCB - Dublin, TX.	As of 6/01/02 Included: WQMPs completed and submitted to TSSWCB Regional Office in Dublin, TX for approval; 7 WQMPlan(s) 002 forms being sent to Dublin Regional Office, 11 Contract(s) Follow-up(s) Revision(s) and discussion(s) w/ Dublin regional office as mistakes in planning are found,	75%
	3.7		
	Annual Status Reviews looking for correct implementation based on WQMPlanning and NRCS standards & specs.	No WQMPlans have completely been implemented due to wet weather. 2 Annual Reviews completed. No further Reviews completed due to performance certifications coming in almost everyday and work being implemented weekly.	75%

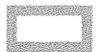
3rd Quarter Report for FY03		North Central Texas Remediation Project - Johnson Co. - Richland Chambers	TSSWCB Project #00-03
Task	Deliverables & Subtask	3rd Quarter Activities FY 2003	Completion Status (%)
4	4.1	As of 6/1/02: Final Report Preparations, - involving detailing maps on Arcview, Acrview training and setup for final report, Final Report required content review;	55%
	Developing District Land Units Map and Data bases of WQMPlans Status and Progress		
5	5.1	Meeting with one producer in SB 503 watershed, Taking names and information from producers interested in the program for 2003 implementation, Developing maps for Prospective plans.	NA
	Assistance w/ Allocating funds.		
	5.2	WQMP follow up planning implementation with 4 cooperators, Engineering designs for ponds reviewed and prepared for meeting with engineer, WQMPlanning involving arcview for correct dollar allocations. Plan Map Revisions as mistakes are found.	NA
	WQMPPlan Development, Certifications & Reviews, Follow-ups & Designs		
	5.3		
Implementation & Technical Assistance	Pond Assistance discussion w/ contractor; Planning assistance w/ technician certifying construction, Technical implementation procedures assistance with two contractors, Construction Advise on Fences, Staking Pond assistance to technician, Assistance to 6 cooperators and 2 contractors.	NA	
5.4	Performance Certifications, & Annual Status Reviews	Check out assistance on acre certification w/ planner for the program. Deadline information regarding contracts and practices lacking in completion.	NA

Appendix E:

- ✓ Location map of WQMPs in the County

Water Quality Management Plans Final Report For Johnson County Soil and Water Conservation District



 319 Land Units
Richland Chambers Watershed

Appendix F:

- ✓ Inventory of BMP's

Inventory of Cost Shared BMP's for Johnson County SWCD Project 319

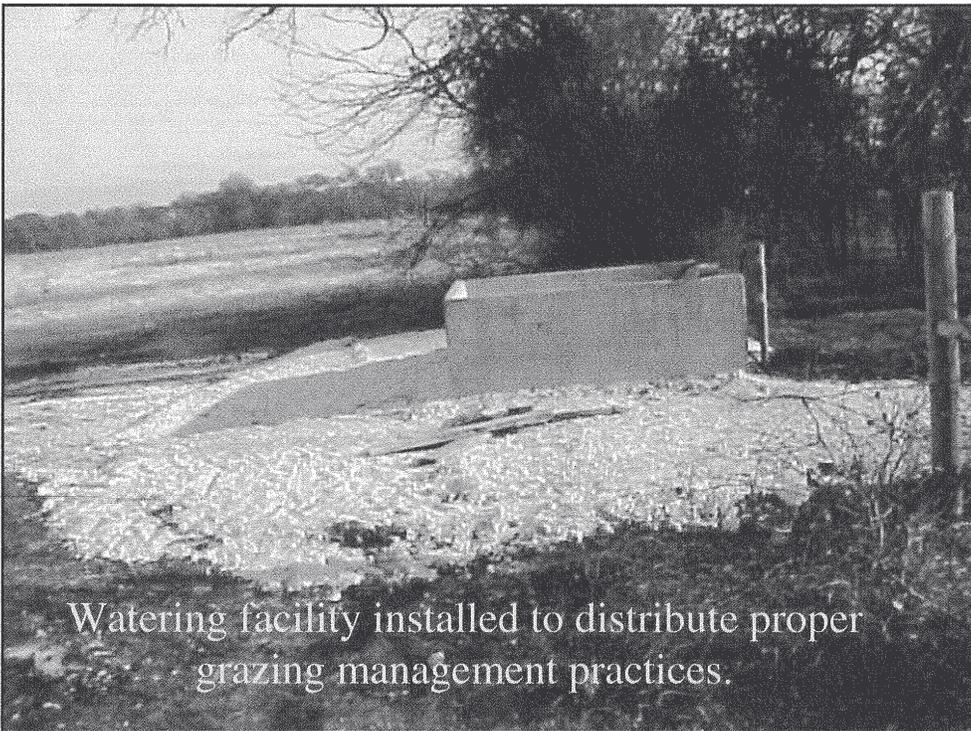
WQMP ID#:	Brush Management Ac.	Critical Area & Waterway Shaping Ac.	Cross Fencing Ft.	Nutrient Management Ac.	Pest Management Ac.	Pipelines & Installation Ft.	Pond no.	Pasture & Hayland Planting ac.	Terraces Ft.	Watering Troughs No.	Water Wells Installed No.
1		1.6		156.1	70.2		1	70.2			
3				95	95		1	95			
4				61.1	61.1			61.1			
5	22			22	22			22			
7								35			
8	17		2520	66	83		1	66			
9				24	24			24			
10	10.5			84	84			84			
12				120	120			120			
14			2181	39	39		1	39			
15				34.3	34.3			34.3			
16				15.7	15.7			15.7			
17				9	9			9			
19			2500	86.8	86.8		1	86.8			
20							1				
22	7.27			7.27	7.27			7.27			
23								6.15			
24		12		11.1	11.1		1	11.1			
25	11						1				
27				27.019	27.019			27.019			
30		6.7					1583	6.7	6180		
31				66	77			66			
33				25.8	25.8	1064		25.8		2	1
34			1688	89	89	2053		89		1	
35				118	118			118			
36	15			47	47		1	43			
38	33.5			33.5	33.5			33.5			
39				37.5	37.5			37.5			
41					114.7	512				2	1
42			2855				2				
43				8.8	8.8		2	8.8			
44				14.3			1	14.3			
45		1.01		1.01	1.01			1.01			
46							1				
47							2				
TOTALS=	116.27	21.31	11744	1237.799	1341.799	3629	1600	1257.249	6180	5	2

Appendix G:

✓ Project photos

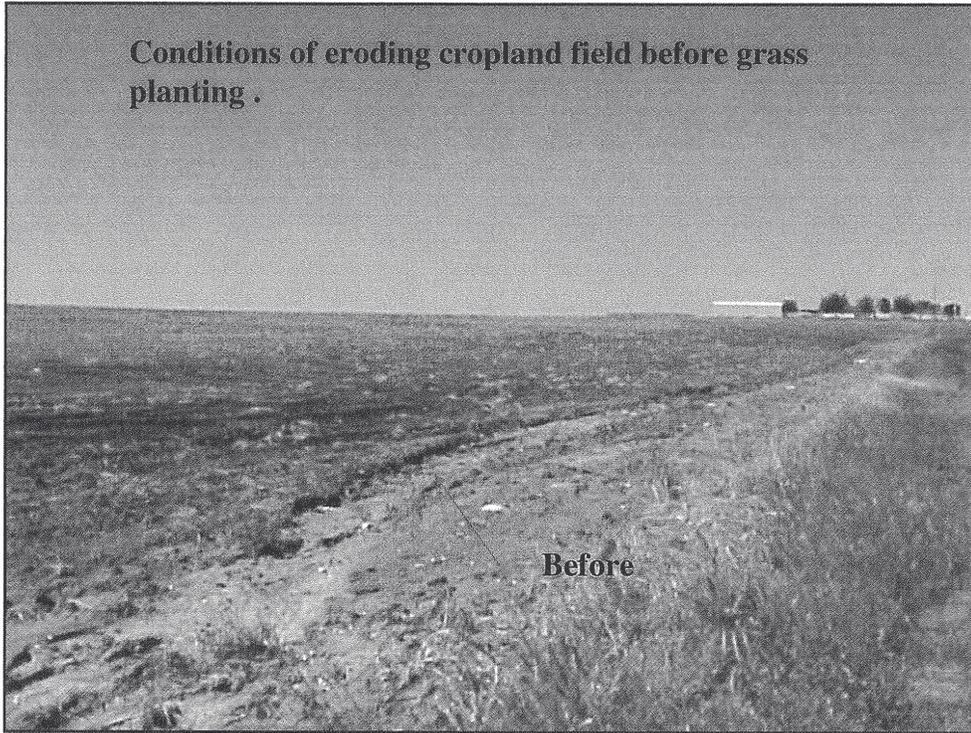


Meetings with producers often began as walk-ins to the office to set up appointments for WQMPlan development and implementation.



Watering facility installed to distribute proper grazing management practices.

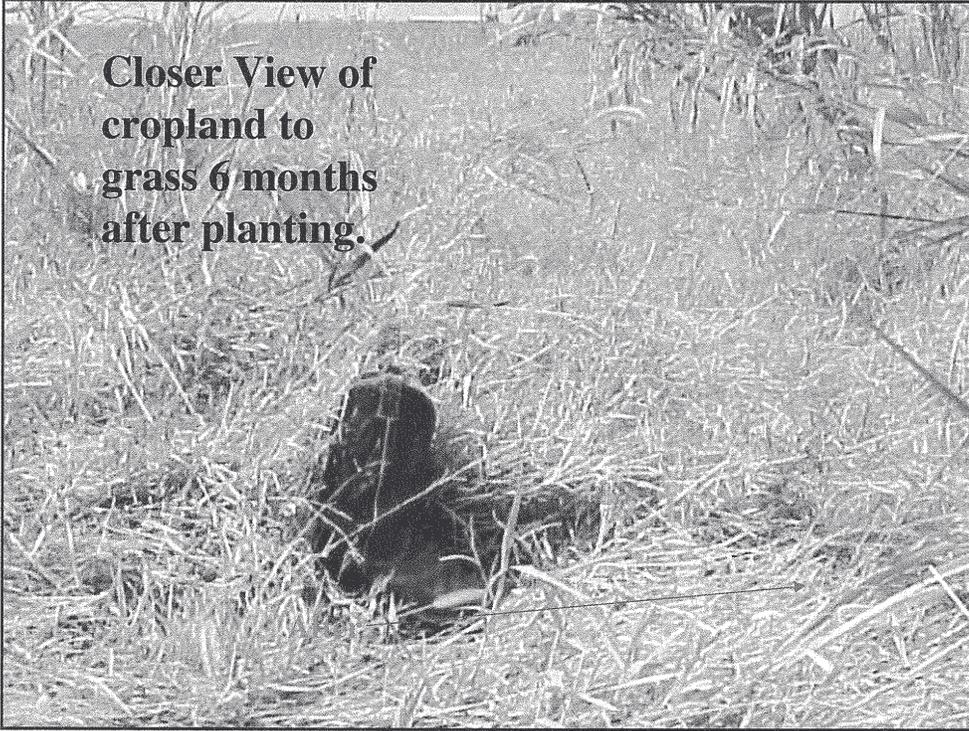
Conditions of eroding cropland field before grass planting .



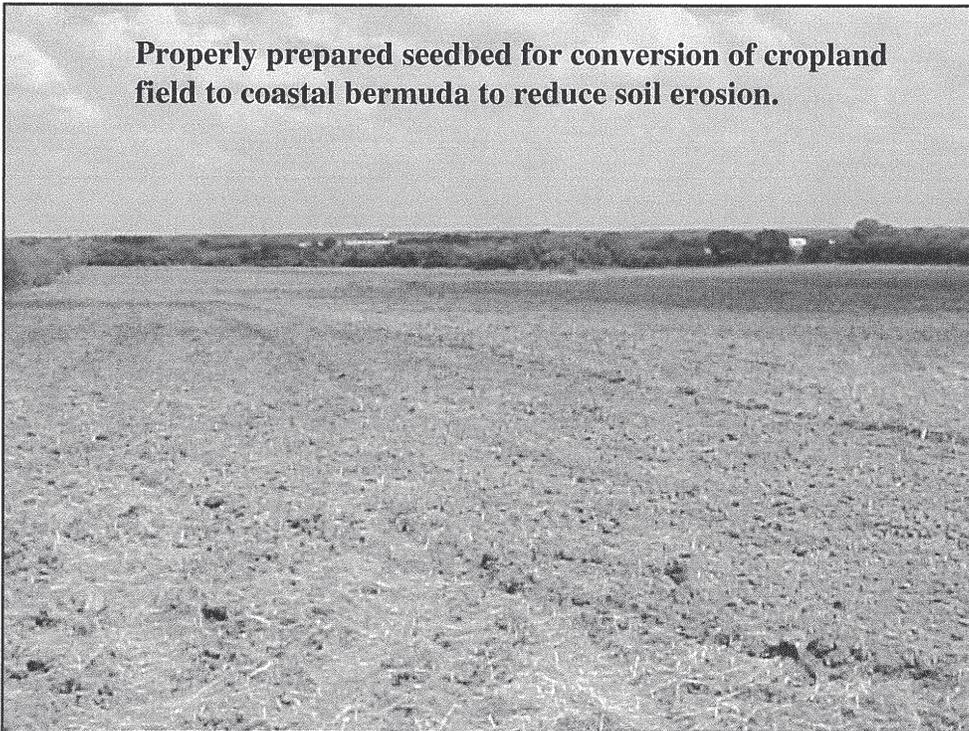
Cropland field 6 months after grass planting.



**Closer View of
cropland to
grass 6 months
after planting.**



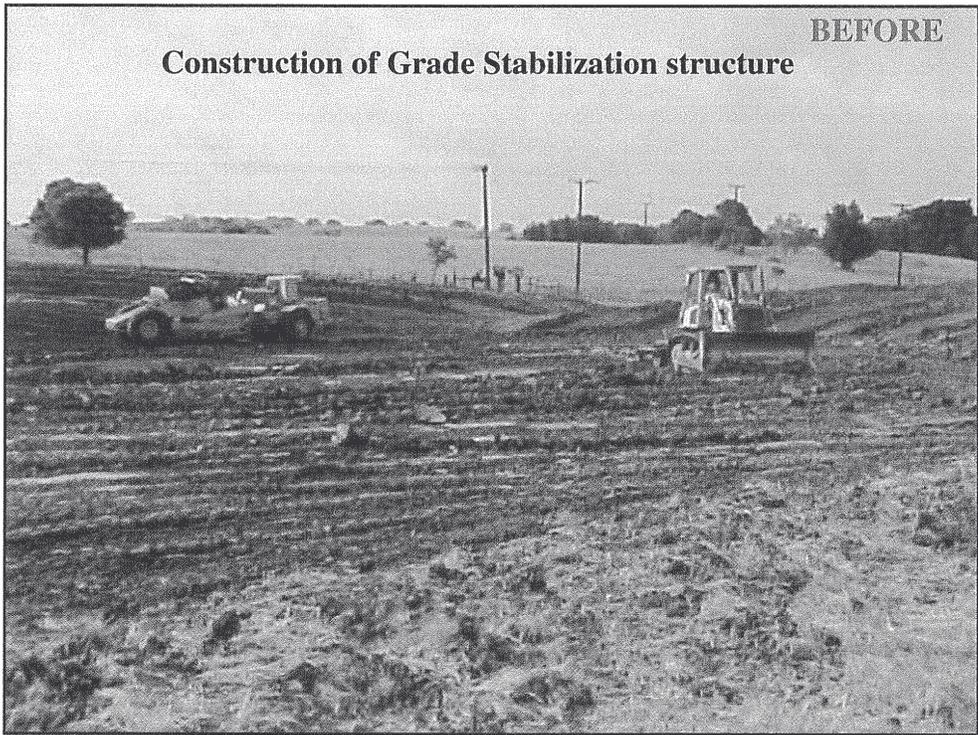
**Properly prepared seedbed for conversion of cropland
field to coastal bermuda to reduce soil erosion.**



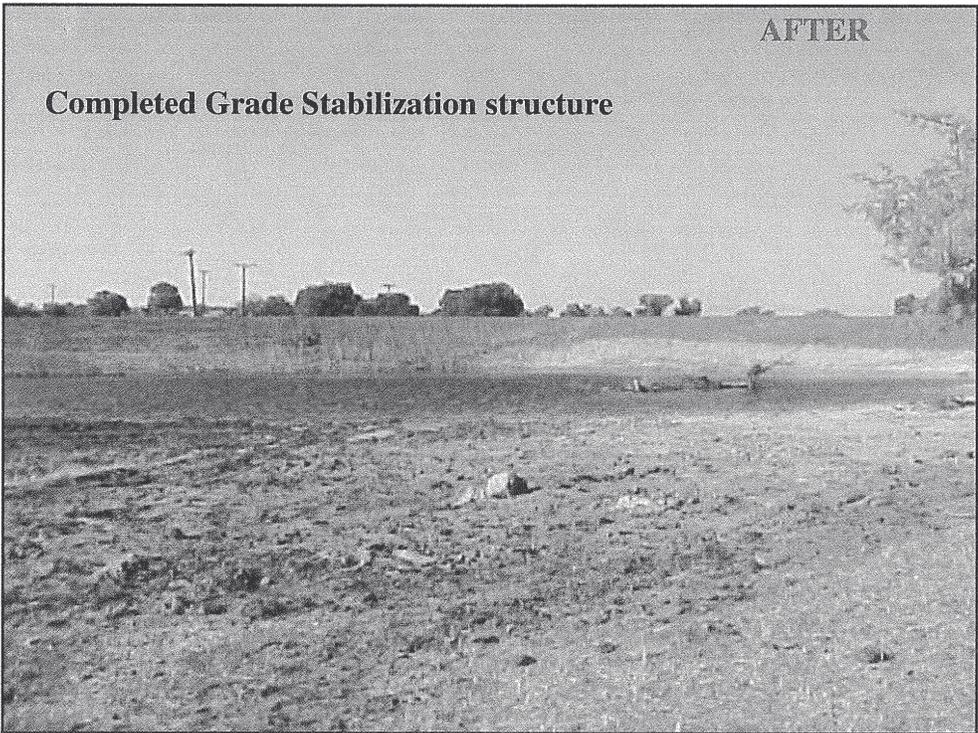


Sediment control basin
constructed to prevent soil
erosion and sedimentation.

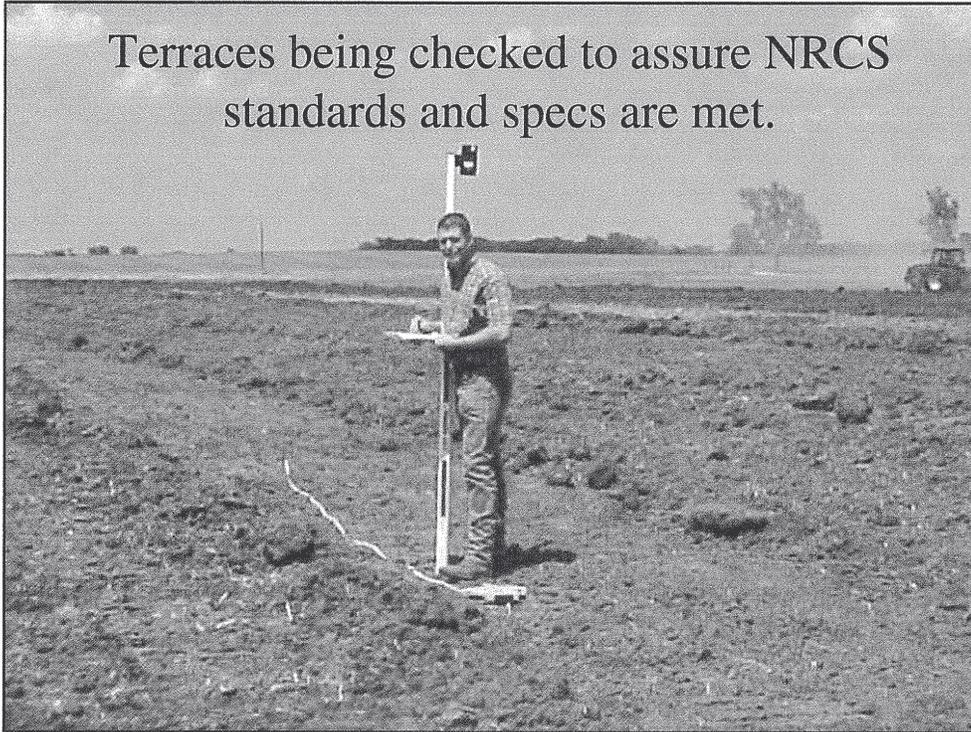
BEFORE
Construction of Grade Stabilization structure



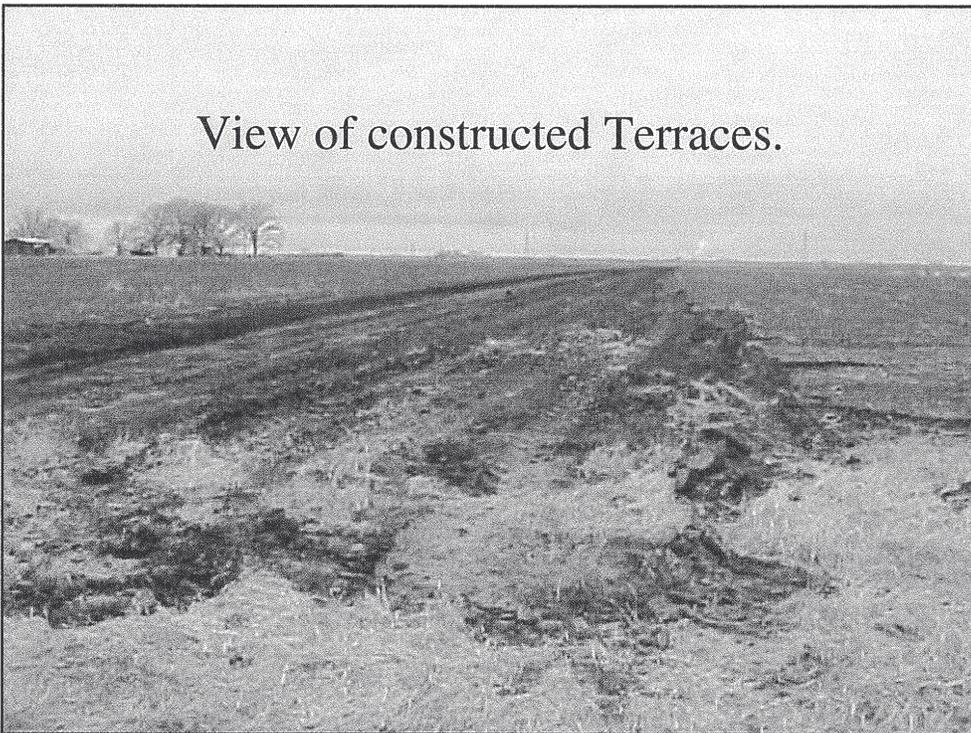
AFTER
Completed Grade Stabilization structure



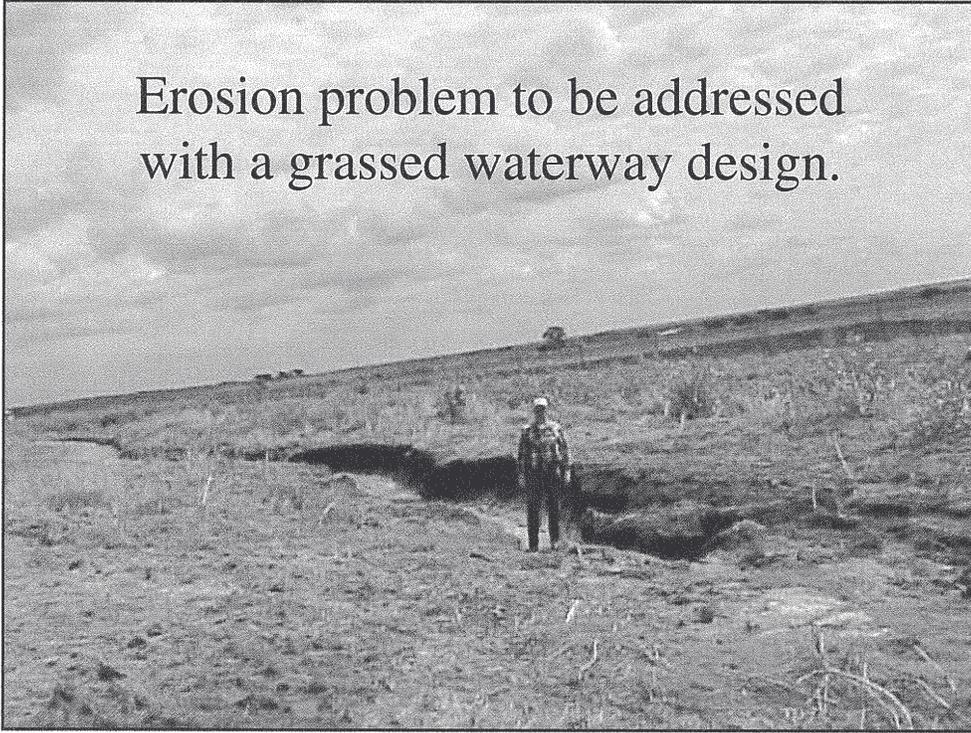
Terraces being checked to assure NRCS standards and specs are met.



View of constructed Terraces.



Erosion problem to be addressed
with a grassed waterway design.



Combination of grassed waterways and terraces will
be used to address erosion in cropland field.

