

**Texas AgriLife Research**

**Agricultural NPS Remediation in the Cedar Creek Reservoir Watershed  
Section 319(h) Nonpoint Source Program  
FY 2007 Project 07-14**

Quarter no. 15 From 7/1/11 Through 9/30/11

**I. Abstract**

Most project activities are completed and deliverables met. The SWCD technician, AgriLife personnel and the Texas Water Resources Institute project manager worked together to gather and format the final task reports and information. This information was all compiled and the project Draft Final Report was submitted to TSSWCB on August 4, 2011.

**II. Overall Progress and Results by Task**

**TASK 1: DEVELOP AND IMPLEMENT WATER QUALITY MANAGEMENT PLANS**

*Subtask 1.1 The Kaufman-Van Zandt SWCD will hire a technician to provide technical assistance to landowners on the development of WQMPs. The TSSWCB Mount Pleasant Regional Office will train the technician.*

The following actions have been completed during this reporting period:

- The Kaufman-Van Zandt Soil and Water Conservation District hired Zach Kinsey to serve as the technician for this project on February 20, 2008.

**100% Complete**

*Subtask 1.2 The SWCD technician will 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 following actions have been completed during this reporting period:

- No activity this quarter.

**100% Complete**

*Subtask 1.3 The SWCD technician will coordinate with other agencies and programs providing landowners incentives for adopting Best Management Practices.*

The following actions have been completed during this reporting period:

- Work continued this quarter.

**100% Complete**

*Subtask 1.4 The SWCD technician will attend meetings with the TSSWCB project manager and other meetings, as needed, to review project status, deliverables, etc.*

The following actions have been completed during this reporting period:

- Work continued this quarter.

**100% Complete**

*Subtask 1.5 The SWCD technician will prepare materials for inclusion in quarterly reports and the final report for submittal by TWRI to the TSSWCB.*

The following actions have been completed during this reporting period:

- Zach Kinsey provided information for this quarterly report.
- Zach Kinsey compiled and prepared his materials for the Draft Final Report and updated and submitted the BMP spreadsheet.
- Draft Final Report was submitted to TSSWCB.

**100% Complete**

*Subtask 1.6 The Kaufman-Van Zandt SWCD will be allocated \$300,000 in 319(h) funding to provide cost-share to landowners in the Cedar Creek Watershed to implement BMPs that reduce nutrient and sediment runoff to local waterbodies. In addition, TRWD will provide \$50,000 in cost-share funds. The maximum cost-share rate shall not exceed 70% of the cost of implementation of the BMP with 60% coming from 319(h), 10% from TRWD funds, and 30% from the landowner. Landowners shall be eligible to receive a maximum cost-share amount of \$15,000 from the TSSWCB 319(h) funds. Cost share will be based on actual cost not to exceed average cost of the practice.*

The following actions have been completed during this reporting period:

- No activity this quarter.

**90% Complete**

*Subtask 1.7 The SWCD technician will send out notifications announcing the availability of assistance for implementing WQMPs/BMPs and will assist the SWCD in accepting and prioritizing the WQMP applications. The TSSWCB project manager must approve all announcements, letters and publications developed before distribution.*

The following actions have been completed during this reporting period:

- No activity this quarter.

**100% Complete**

*Subtask 1.8 The SWCD technician, with assistance from NRCS and the TSSWCB Mount Pleasant Regional Office, will provide landowners information on appropriate BMPs and will work with landowners in developing and implementing a minimum of 20 WQMPs.*

The following actions have been completed during this reporting period:

- No activity this quarter.

**100% Complete**

*Subtask 1.9 The TSSWCB Mount Pleasant Regional Office will provide technical review and certification of WQMPs. During this process, TSSWCB will certify all WQMPs and ensure that they are consistent with state water quality standards.*

The following actions have been completed during this reporting period:

- No activity this quarter.

**100% Complete**

*Subtask 1.10 The SWCD technician will conduct status reviews on all WQMPs to ensure BMP implementation schedules are being followed.*

The following actions have been completed during this reporting period:

- Zach continued working on status reviews, signing off and checking on everything.

**100% Complete**

*Subtask 1.11 The SWCD technician will assist landowners in the SWCD with the acquisition of current soil tests through utilization of project funding. Funding for 100 soil tests annually will be provided.*

The following actions have been completed during this reporting period:

- Work continued this quarter.

**100% Complete**

*Subtask 1.12 The SWCD will have an audit completed at least once during the project period.*

The following actions have been completed during this reporting period:

- No activity this quarter.

**100% Complete**

*Subtask 1.13 The SWCD technician, with assistance from the NRCS and TSSWCB Mount Pleasant Regional Office, will compile information on the location and types of BMPs for each WQMP implemented within the Cedar Creek Reservoir, Kings Creek, and Cedar Creek Watersheds.*

The following actions have been completed during this reporting period:

- No activity this quarter.

**100% Complete**

## **TASK 2: VERIFY BMP EFFECTIVENESS**

*Subtask 2.1 Texas AgriLife Research will develop a Quality Assurance Project Plan (QAPP) that will detail project goals and objectives, the data needs to fulfill those objectives, lists field and laboratory methods, procedures and schedules to be followed, and specify a data management structure and quality assurance protocols. The QAPP will be developed using guidelines in EPA QA/R-5, "EPA Requirements for Quality Assurance Project Plans".*

The following actions have been completed during this reporting period:

- The QAPP was reviewed and approved by TSSWCB and EPA

**100% Complete**

*Subtask 2.2 Texas AgriLife Research will provide annual revisions to the QAPP and amendments, as needed, to the TSSWCB and EPA. (Start Date: Month 6; Completion Date: Month 36)*

The following actions have been completed during this reporting period:

- No revisions were required during this reporting period.

**100% Complete**

*Subtask 2.3 Texas AgriLife Research will construct 10 replication plots 2,500 square feet in size and measuring 50X50 ft to evaluate agricultural BMPs for cropland and pasture lands. Texas AgriLife Research will install run off collection instruments and soil moisture monitoring equipment in the runoff plots and gather benchmark runoff data from each plot before initiating BMPs.*

The following actions have been completed during this reporting period:

- Flow measuring equipment, ISCO runoff samplers and best management practices were maintained and monitored in the cropland and pastureland runoff plots to guarantee operability.
- Fertilizer was applied to grassland plots with nutrient management as BMP, according to soil test recommendations.

**100% Complete**

*Subtask 2.4 Texas AgriLife Research will collect runoff data including flow intensities and volumes, sediment loads, total and soluble N and P concentrations, pH, electrolytic conductivity, total and dissolved organic carbon, and dissolved oxygen content. Treatments will consist of the following: 1) Control, 2) Residue management, 3) Buffer Strips, 4) Fertilizer and Nutrient Management, and 5) Cropland converted to forage production.*

The following actions have been completed during this reporting period:

- No activity this quarter.

**100% Complete**

*Subtask 2.5 Texas AgriLife Research will use runoff data and data from other sources to calculate the nutrient and sediment load reductions resulting from the project for inclusion in the final report.*

The following actions have been completed during this reporting period:

- Flow data for this reporting period have been processed. Nutrient and sediment load calculations using processed flow data were finalized this period.
- Submitted draft final technical report to TSSWCB for review.

**100% Complete**

### **TASK 3: PROVIDE WATER QUALITY EDUCATION**

*Subtask 3.1 Texas AgriLife Extension and Texas AgriLife Research will assimilate and evaluate the adequacy of existing educational resources and resource needs to provide educational support for the project.*

The following actions have been completed during this reporting period:

- AgriLife Extension developed two new fact sheets—one on grassed waterways and another on filter strips—to be used to educate producers on the benefits of these practices, how to operate, how to maintain them, and the cost of implementation.

**100% Complete**

*Subtask 3.2 Texas AgriLife Extension and Texas AgriLife Research will provide biannual educational/training events on single- or multi-county level to: 1) improve landowner knowledge and understanding of BMPs for nutrient management and erosion control, 2) provide information on project activities and results and 3) provide additional training on implementing and sustaining BMPs. NRCS, TSSWCB, and Kaufman-Van Zandt SWCD personnel will be requested to be speakers to provide information on cost share and technical assistance programs available to assist producers.*

The following actions have been completed during this reporting period:

- Texas AgriLife Research and the Kaufman County AgriLife Extension Office in cooperation with the Kaufman-Van Zandt SWCD and USDA-NRCS have scheduled a Small Acreage Landowner Resource Management Workshop for October 21, 2011 in Rockwall. See press release and agenda in Appendix A following this report.

**95% Complete**

*Subtask 3.3 Texas AgriLife Extension and Texas AgriLife Research will conduct a preliminary survey of a select group of initial event participants to evaluate knowledge about surface water conditions in the watershed and assess current knowledge and use of erosion control and nutrient management practices. Follow-up surveys will be conducted in subsequent years to evaluate changes, if any, in producer awareness and BMP implementation.*

The following actions have been completed during this reporting period:

- Surveys have been completed and have been summarized for the final report.

**100% Complete**

#### **TASK 4: COORDINATE PROJECT ACTIVITIES AND REPORTING**

*Subtask 4.1 TWRI, with input from the Project Partners, will prepare electronic quarterly reports for submission to the TSSWCB. All progress reports will be provided to all Project Participants.*

The following actions have been completed during this reporting period:

- TWRI will submit the Year 4, Quarter 15 Progress Report on October 13, 2011.

**100% Complete**

*Subtask 4.2 TWRI will coordinate quarterly TTVN meetings or teleconferences, as appropriate, with project participants to discuss project activities, project schedule, lines of responsibility, communication needs, and other requirements.*

The following actions have been completed during this reporting period:

- TWRI worked with Zach and the personnel at the Dallas Center as well as TSSWCB to make sure final project deliverables were met and to finalize information and needs for the draft final report.

**100% Complete**

*Subtask 4.3 TWRI will attend meetings with the TSSWCB project manager, SWCD, and other meetings, as needed, to review project status, deliverables, etc.*

The following actions have been completed during this reporting period:

- TWRI worked with Zach and the personnel at the Dallas Center as well as TSSWCB to make sure final project deliverables were met and to finalize information and needs for the draft final report.

**100% Complete**

*Subtask 4.4 TWRI will assist Project Partners with the completion and submittal of a final report to the TSSWCB at the culmination of the project. This report will be completed and provided to the TSSWCB in electronic format (i.e. compact disc, etc.).*

The following actions have been completed during this reporting period:

- TWRI project manager assisted with compiling/writing, editing/review, and layout for task participants on their final task reports.
- TWRI compiled the task reports and finalized the draft final report.
- The Draft Final Report was submitted to TSSWCB on August 4, 2011.

### **90% Complete**

### **III. Related Issues/Current Problems and Favorable or Unusual Developments**

- Nothing to report this quarter.

### **IV. Projected Work for Next Quarter**

- Zach will continue working on WQMPs, status reviews and monitoring BMP progress.
- Working through the County Extension Agents in Kaufman, Henderson, Van Zandt and Rockwall counties, the project team will continue to coordinate educational events in the Cedar Creek Watershed.
- Continue working with the Kaufmann-Van Zandt SWCD, TSSWCB, USDA-NRCS, Texas AgriLife Research, Texas AgriLife Extension Service, TWRI and TRWD. Efforts will be made to publicize the project and raise awareness of water quality issues within the study area.
- After TSSWCB's review of the Draft Final Task Reports, any revisions will be considered and incorporated to finalize the reports as soon as possible once TSSWCB revisions are received and edits can be made.

# Appendix A

Press Release and Agenda  
for  
Small Acreage Landowner Resource Management Workshop  
on October 21, 2011



Oct. 5, 2011

Small-Acreage Landowner Resource Management Workshop slated for Oct. 21 in Rockwall

Paul Schattenberg

Clint Wolfe, [c-wolfe@tamu.edu](mailto:c-wolfe@tamu.edu)

David Waidler, 972-952-9689, [d-waidler@tamu.edu](mailto:d-waidler@tamu.edu)

ROCKWALL -- A Small-Acreage Landowner Resource Management Workshop will be presented from 9 a.m.-1 p.m. at 460 Pullen Rd. on Oct. 21 in Rockwall.

The workshop is being presented by the Texas A&M AgriLife Research and Extension Center in Dallas in conjunction with the U.S. Department of Agriculture's Natural Resources Conservation Service, Tarrant Regional Water District and the Kaufman-Van Zandt Soil and Water Conservation District. It is being held at the residence of Jackie Pullen, located on Pullen Rd. between West Farm-to-Market 550 and North Texas-205.

Those attending the workshop will learn about conservation practices for nutrient management, soil retention and preservation of water quality, according to Clint Wolfe, Texas AgriLife Research grant and program coordinator, Texas A&M AgriLife Research and Extension Center in Dallas

"Attendees also will have the opportunity to consult with experts from the Kaufman-Van Zandt Soil and Water Conservation District regarding water quality management plans for rural properties, as well as receiving information about financial incentives for implementing best management practices," Wolfe said, adding that Texas Department of Agriculture continuing education units are available for program participants.

The workshop begins at 9 a.m. with a welcome and introductions from Wolfe and Pullen, a local landowner and producer.

At 9:15 a.m., Darrel Andrews of the Tarrant Regional Water District will speak on water quality issues associated with the Cedar Creek Watershed. Andrews will be followed by Zack Kinsey of the Kaufman-Van Zandt SWCD, who will present on water quality management plans for local landowners. Kinsey will be followed by Glenn Lubke of USDA-NCRS, who will address funding partnerships for best management practices implementation.

At 10:45 a.m., USDA-NRCS and Kaufman-Van Zandt SWCD will hold a Best Management Practice Tour, which will include technical information related to fencing, grass planting, nutrient management, grassed waterways and edge of field filter strips. Lunch, which is included with workshop registration, will follow at 12:15 p.m.

Workshop registration is \$10 and may be paid by cash or check. Checks should be made payable to Texas AgriLife Extension. The deadline for registration is Wednesday, Oct. 19.

RVSP to David Waidler with Texas AgriLife Research at 972-952-9689 or [d-waidler@tamu.edu](mailto:d-waidler@tamu.edu) to hold a place at the workshop.

This workshop is made possible with funding from the USDA-NRCS as well the Texas State Soil and Water Conservation Board through a Clean Water Act §319(h) grant from the U.S. Environmental Protection Agency.

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# Small Acreage Landowner Resource Management Workshop

Friday, October 21, 2011  
460 Pullen Road  
Rockwall, Texas 75032

- 9:00AM Welcome and Introductions  
*Clint Wolfe, Texas AgriLife Research*  
*Jackie Pullen, Local Landowner and Producer*
- 9:15AM Cedar Creek Watershed and Water Quality Issues  
*Darrel Andrews, Tarrant Regional Water District*
- 9:45AM Water Quality Management Plans for Local Landowners  
*Zack Kinsey, Kaufman-Van Zandt SWCD*
- 10:15AM Funding Partnerships for BMP Implementation  
*Glenn Lubke, USDA-NRCS*
- 10:45AM Best Management Practice Tour and Technical Information:  
Fencing, Grass Planting, Nutrient Management, Grassed  
Waterway  
*USDA-NRCS and Kaufman-Van Zandt SWCD*
- 12:15PM Barbeque Lunch

