

NONPOINT SOURCE SUMMARY PAGE

FY 05 CWA 319(h)

1. TITLE OF PROJECT: Peach Creek Water Quality Improvement Project

2. PROJECT GOALS/OBJECTIVES: This project will provide agricultural producers in the Peach Creek watershed with an opportunity to participate in water quality educational activities, technical assistance, and financial assistance for the implementation of Best Management Practices (BMPs), in order to improve water quality. The main goal of this project is to reduce the bacterial levels in the impaired Peach Creek watershed to a level compliant with Texas Water Quality Standards.

3. PROJECT TASKS: (1) Program Coordination and Management (2) Develop, Implement, and Maintain Water Quality Management Plans (WQMPs) to Reduce Bacterial Runoff. (3) Provide Water Quality Education on BMPs to Reduce Bacterial Runoff.

4. MEASURES OF SUCCESS: (1) Improved knowledge of water quality problems in the watershed and BMPs for remediation of the bacterial impairment as measured through pre- and post-education program surveys. (2) Implementation of a minimum of 24 WQMPs in the Peach Creek watershed. (3) Conduct a minimum of 110 Status Reviews in the Peach Creek watershed. (4) Reduction of bacterial levels in Peach Creek to TMDL allocation levels. (5) Provide free testing of 800 soil and/or litter samples.

5. PROJECT TYPE: Statewide () Watershed (X) Demonstration () Other ()

6. WATERBODY TYPE: River (X) Lake () Wetland () Ground Water () Other ()

7. PROJECT LOCATION: Peach Creek, Segment 1803C

8. NPS MANAGEMENT PROGRAM REFERENCE: State of Texas Agricultural/Silvicultural Nonpoint Source Management Program – Approved February 15, 2000.

9. NPS ASSESSMENT REPORT STATUS: Impaired (X) Impacted () Threatened ()

10. KEY PROJECT ACTIVITIES: Hire Staff (X) Monitoring () Technical Assistance (X) Education (X) BMP Implementation (X) Demonstration Project () Other ()

11. NPS MANAGEMENT PROGRAM ELEMENTS: Implementing Milestones from the *1999 Texas Nonpoint Source Pollution Assessment Report and Management Program* including (1) providing financial assistance to Soil and Water Conservation Districts (SWCDs) for the implementation of WQMPs in order to reduce NPS pollution, (2) coordinating with Federal, State, and Local Programs, and (3) technology transfer, technical support, administrative support and cooperation between agencies and programs for the prevention of NPS pollution.

12. PROJECT COSTS: Federal: (\$465,123) Local Match: (\$245,188) Total Project: (\$710,311)

13. PROJECT MANAGEMENT: Gonzales County SWCD & Texas Cooperative Extension

14. PROJECT PERIOD: September 1, 2005 through September 31, 2009

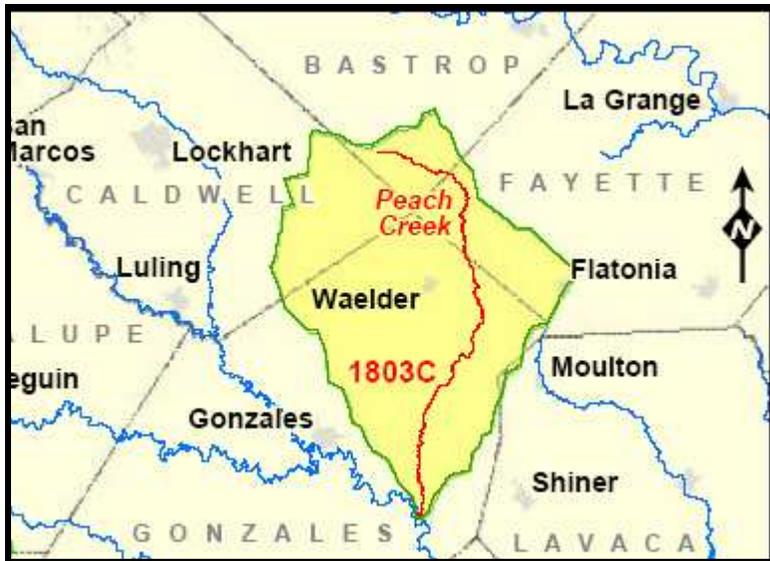
Peach Creek Water Quality Improvement Project

FY05 CWA Section 319(h)

WORKPLAN

Problem Need/Statement:

Peach Creek is located in the southern portion of the Guadalupe-Blanco River Basin. It originates in southern Bastrop County and flows south through Fayette County into Gonzales County to its confluence with the Guadalupe River southeast of the Gonzales. The 488 square mile watershed is dominated by mixed woods, rangeland and agricultural land. Cow/calf and poultry production are the primary agricultural activities in the watershed.



Designated uses for Peach Creek include contact recreation. According to the 303(d) List, concentrations of bacteria in Peach Creek pose a potential health risk for swimmers. In response to these conditions, a total maximum daily load (TMDL) project was initiated by Texas Commission on Environmental Quality (TCEQ) to determine the measures necessary to restore water quality in this stream. Initial bacterial source tracking (BST) results indicate that cattle, domestic sewage, and chickens are the largest contributors of bacteria to Peach Creek. This *Peach Creek Water Quality Improvement Project* will proactively address the agricultural sources of bacteria identified by the BST study. The TSSWCB Watershed Coordinator based in the Wharton Regional Office is beginning development of a Watershed Protection Plan (WPP). All measures implemented through this project (as described below) will be included in the WPP.

General Project Description:

This project will expand the efforts and activities of the Gonzales County SWCD, the TSSWCB, the TCEQ, and the Texas Cooperative Extension (TCE) to encourage the implementation of BMPs to reduce bacterial runoff from agricultural nonpoint sources in the Peach Creek watershed. It will utilize existing efforts being lead by TSSWCB, Gonzales County SWCD, TCEQ, and, specifically the TMDL and WPP being developed with cooperation from the Peach Creek Bacteria TMDL Advisory Group. The WPP will be written in accordance with EPA's nine elements and will include the activities outlined in this workplan.

The overall objective of this project is to implement BMPs to reduce bacteria levels in the Peach Creek to help achieve compliance with the Texas Water Quality Standards. Project leaders will educate agricultural landowners on the water quality issues in the watershed and what measures they can implement to reduce the runoff of bacteria into the stream. In addition, this project will provide technical and financial assistance for the implementation of BMPs to reduce the amount of bacteria entering the creek.

Tasks, Objectives, Schedules, and Estimated Costs:

Task 1: Program Coordination and Management

Costs: \$125,928 (Federal), \$0 (Non-Federal Match), \$125,928 (Total)

Objectives: (1) Provide technical assistance to agricultural producers in the Peach Creek watershed. (2) Develop timely and comprehensive reports.

Subtask 1.1: The Gonzales County SWCD will hire a technician to develop, implement, and maintain WQMPs and other tasks in this workplan.

Subtask 1.2: The technician will attend monthly Gonzales County SWCD board meetings to discuss technical assistance activities, project schedule, lines of responsibility, communication needs, and other required tasks with project participants.

Subtask 1.3: The technician will attend meetings with the TSSWCB project manager and other meetings, as needed, to review project status, deliverables, etc.

Subtask 1.4: The technician, as appropriate, will assist with educational activities outlined in Task 3.

Subtask 1.5: The technician will complete and submit quarterly reports to the TSSWCB project manager.

Subtask 1.6: The technician will complete and submit 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.).

Deliverables

- Quarterly reports documenting project status.
- Final report.

Task 2: Development, Implementation, and Maintenance of WQMPs

Costs: \$308,375 (Federal), \$243,000 (Non-Federal Match), \$551,375 (Total)

Objectives: (1) Encourage cattle operations along Peach Creek and its direct tributaries to implement BMPs that reduce bacterial runoff through a traditional, voluntary-based incentive program by assisting cattlemen in developing, implementing and maintaining WQMPs. (2) Provide free soil and litter testing for applicators of poultry litter in the Peach Creek watershed who operate under a WQMP. (3) Conduct Status Reviews of all WQMPs in Peach Creek watershed. (4) Provide financial assistance for poultry lagoon closure to producers who operate under a WQMP.

Subtask 2.1: The technician will develop a minimum of 24 WQMPs within the Peach Creek watershed (Month 1 to Month 36)

Subtask 2.2: Cost-share will be provided to cattlemen along Peach Creek and its direct tributaries to implement BMPs that reduce bacterial runoff.

- A WQMP will be required in order to qualify for financial assistance.
- The maximum cost-share rate shall not exceed 50 % of the cost of implementation of the BMPs.
- Cost share will be based on actual cost not to exceed average cost of the practice.
- Landowners shall be eligible to receive a maximum cost-share amount of \$10,000.
- In order to encourage the implementation of prescribed grazing (528A) and to provide alternative sources of water, cost-share funding shall be provided for ponds (378), fencing (382), pipelines (516), watering facilities (614), wells (642), brush management (314) and pasture and hayland planting (512). The practices, riparian herbaceous buffer (390) and riparian forest buffer (391), are also eligible for cost-share funding.
- Only land located directly along Peach Creek and its direct tributaries are eligible for cost-share funding. Those nearest to the zone of impairment will be given highest priority.

Subtask 2.3: The technician will assist poultry producers in the Peach Creek watershed with the closure of lagoons.

- A WQMP will be required in order to qualify for financial assistance for the closure of waste lagoons (360).
- Cost share will be based on actual cost not to exceed average cost of the practice.
- Landowners shall be eligible to receive a maximum cost-share amount of \$30,000.

Subtask 2.4: The Gonzales County SWCD will (1) send out notifications to eligible landowners (those located along Peach Creek and its direct tributaries) announcing the availability of assistance for implementing WQMPs/BMPs and (2) will prioritize the WQMP applications received.

Subtask 2.5: The technician will provide landowners information on appropriate BMPs and will work with the TSSWCB Wharton Regional Office in developing and implementing WQMPs.

Subtask 2.6: TSSWCB 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.

Subtask 2.7: The technician will conduct Status Reviews of all WQMPs in the Peach Creek watershed. A list of the WQMPs reviewed will be reported quarterly. A total of 110 Status Reviews will be conducted during the project period.

Subtask 2.8: The technician will create a map showing the location of all WQMPs developed and implemented in the Peach Creek watershed for inclusion in the final report.

Subtask 2.9: The technician will assist holders of WQMPs in the acquisition of current soil and litter tests through utilization of project funding.

- Any land use will be eligible (poultry AFO, cattle pasture, hayland, cropland) as long as waste (poultry litter) utilization (633) is practiced in the WQMP.

Subtask 2.10: The technician will compile information on the location and types of BMPs for all WQMPs implemented in the Peach Creek watershed.

Deliverables:

- 24 WQMPs developed and implemented within the Gonzales County SWCD.
- 110 annual status reviews will be submitted to the TSSWCB
- Spreadsheet and map showing location and types of BMPs for each WQMP implemented

Task 3: Water Quality Education of BMPs to Reduce Bacterial Runoff

Costs: \$30,820 (Federal), \$2,188 (State), \$ 33,008 (Total)

Objective: In order to promote the implementation of cost effective BMPs, information will be provided to landowners in the Peach Creek Watershed and throughout Gonzales County about (1) the water quality issues in Peach Creek and the county, (2) how their operation may affect water quality, (3) application of poultry litter, (4) compliance with new CAFO regulations, (5) range and pasture management, and (6) programs available to assist in implementation of BMPs. This information will be disseminated through the TCE in cooperation with the TSSWCB, SWCDs and TCEQ.

Subtask 3.1: TCE will assimilate and evaluate the adequacy of existing educational resources and resource needs to provide educational support for the project.

Subtask 3.2: TCE will provide 1-2 educational/training events each year (5 total over project) to improve landowner knowledge and understanding of BMPs for bacterial runoff management. These will be targeted to landowners in the Peach Creek watershed,

but will also be made available to landowners throughout Gonzales County. TSSWCB personnel, TCE poultry specialists, TCE range management specialists and other agency personnel including Gonzales County SWCD, will be speakers to provide information on cost share and technical assistance programs available to assist producers.

Subtask 3.3: TCE 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 practices in bacterial runoff management. Follow-up surveys will be conducted in subsequent years to evaluate changes, if any, in producer awareness and in bacterial runoff BMPs.

Subtask 3.4: As needed, TCE will educate landowners and the public through PSAs, newspaper articles, brochures, website or any other media deemed necessary and appropriate for the target audience.

Subtask 3.5: The TCE will complete and submit quarterly reports to the TSSWCB project manager.

Subtask 3.6: The TCE will complete and submit 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.).

Deliverables:

- Compilation of existing and developed resources on bacterial runoff management
- Conduct 5 educational/training events. Provide schedules, agendas, participant lists, presentation information, handouts, and other associated information
- Complete annual producer surveys and provide results
- Quarterly Reports
- Final Report

Coordination, Roles and Responsibilities:

Participating Agencies and Organizations along with their roles in this project include:

- Texas State Soil and Water Conservation Board: Responsible for technical review and certification of WQMPs. Provide assistance to the local SWCD in the implementation and development of WQMPs. Also assist the local SWCD in inventorying current BMPs and land use practices and the implementation of WQMPs.
- TSSWCB Wharton Regional Office: Certification of WQMPs. Watershed Coordination. Assist in the oversight of the technician.
- Gonzales County SWCD: Assist in the oversight of the technician. Develop, implement and maintain WQMPs/BMPs in the Peach Creek watershed.
- Texas Cooperative Extension: Provide water quality, poultry waste management, and range management education.

- **Measures of Success:**

- Improved knowledge of water quality problems in the watershed and BMPs for remediation of the bacterial impairment as measured through pre- and post-education program surveys.
- Implementation of a minimum of 24 WQMPs in the Peach Creek watershed.
- Conduct a minimum of 110 Status Reviews in the Peach Creek watershed.
- Reduction of bacterial levels in Peach Creek to TMDL allocation levels.
- Provide free testing of 800 soil and/or litter samples.

Project Management:

TSSWCB Project Lead:

Name: Lee Munz
Address: Texas State Soil and Water Conservation Board
311 North 5th Street
Temple, Texas 76502
Phone #: 254-773-2250, ext. 238
E-Mail: lmunz@tsswcb.state.tx.us

TCE Project Lead:

Name: John Carey
Address: 2472 TAMU
College Station, Texas 77843-2472
Phone #: (979) 845-4319
E-Mail: jcarey@poultry.tamu.edu

Gonzales County SWCD Lead:

Name: Abigail Lindesy
Address: Gonzales County SWCD
920 St. Joseph Street, Room 142
Gonzales, Texas 78629
Phone #: 830-672-8371
E-Mail: gonzalescountyswcd@tx.nacdnet.org

**Peach Creek Watershed project
Itemized Budget 7/5/07
Contract 05-8**

Object Class Category	Federal	Non-Federal	Total
1 Personnel			
Technician at Gonzales SWCD	<u>\$106,000</u>	<u>\$0</u>	<u>\$106,000</u>
Subtotal Personnel	\$106,000	\$0	\$106,000
2 Fringe Benefits for Technician	\$29,128	\$0	\$29,128
3 Travel	\$0	\$0	\$0
4 Equipment	\$0	\$0	\$0
5 Supplies@ \$50/month	\$2,800	\$0	\$2,800
6 Contractual			
SWCD Financial Audit	\$3,000	\$0	\$3,000
TCE	<u>\$30,820</u>	<u>\$2,188</u>	<u>\$33,008</u>
Subtotal Contractual	\$33,820	\$2,188	\$36,008
7 Construction			
Financial Assistance for WQMP Implementation	<u>\$273,000</u>	<u>\$243,000</u>	<u>\$516,000</u>
Subtotal Construction	\$273,000	\$243,000	\$516,000
8 Other			
Phone Service @ \$50/month (Fax Line)	\$1,800	\$0	\$1,800
Truck gas, maintenance, etc.	\$10,200	\$0	\$10,200
Soil (725 @ \$10) & Litter Samples (75 @ \$15)	<u>\$8,375</u>	<u>\$0</u>	<u>\$8,375</u>
Subtotal Other	\$20,375	\$0	\$20,375
9 Total Direct Costs	\$465,123	\$245,188	\$710,311
10 Total Indirect Costs	\$0		\$0
11 Total Costs	\$465,123	\$245,188	\$710,311