

**Bacterial Monitoring for the Buck Creek Watershed
FY 03 CWA 319(h)
TSSWCB Project No. 03-7**

Quarter no. 11 From 4/01/06 Through 6/30/06.

I. Abstract

Sample collection and analysis continued during Quarter 11 at sites 3, 4, 5, 6, 10A, 10B, 10C, 11, 12, and 13. No flow was observed at the other sites during this quarter. Mapping software continued to be utilized to assist with the evaluation of the watershed and possible sources of contamination. A presentation was made at the Basins Advisory Committee and the Second Annual Stakeholder Meeting was held May 9th in Memphis. The Phase II proposal was sent to the EPA for their review and approval. A new project manager was hired at TWRI and will be taking over the project. Work began on the final report for Phase I of the project.

II. Overall Progress and Results by Task

TASK 1: Program Coordination with Project Participants

Subtask 1.1: Conduct meetings as appropriate with project participants, landowners, and other interested parties to discuss water quality monitoring activities, project schedule, lines of responsibility, communication needs, and other requirements.

The following actions have been completed during this reporting period:

- a. Project staff attended the 2007 Monitoring Coordination Meeting for the Red and Canadian River Basins on April 4th in Wichita Falls. A brief update of monitoring efforts on Buck Creek was given.
- b. The Annual Stakeholders meeting was held May 9, at the Community Center, 721 Robertson, in Memphis, Texas at 9 a.m. 22 people were in attendance.

90% Complete

Subtask 1.2: TAES will prepare electronic quarterly reports. All progress reports will also be provided to TCE project cooperators and participants, and Hall-Childress, Collingsworth, and Donley SWCD directors.

The following actions have been completed during this reporting period:

- a. Submitted Year 3, Quarter 3 report to TSSWCB on 7-12-06.

90% Complete

Subtask 1.3: TCE will provide leadership for educational programs about water pollution and project findings.

The following actions have been completed during this reporting period:

- a. TWRI maintains a project Web site which contains information about the project, the study area, photos, accomplishments, publications and educational outreach material, etc. The Web site can be viewed at <http://twri.tamu.edu/buckcreek>

83% Complete

Subtask 1.4: TAES and TCE will develop an electronic final report, which will include an executive summary of data collected during the project and educational program.

The following actions have been completed during this reporting period:

- a. Research began to identify resource information for the final report
- b. Work was initiated on spreadsheets for the final report appendix.
- c. Watershed Management Plans from other watersheds have been reviewed to find possible bacteria reduction methodologies.

5% Complete

Subtask 1.5: TSSWCB, TWRI, RRA and local SWCDs will assist, when needed, with composition, editing, and publication of final report.

0% Complete

TASK 2: Micro-Watershed Monitoring and Sampling

Subtask 2.1 Develop DQOs and a QAPP to be approved by USEPA.

The following actions have been completed during this reporting period:

- a. The annual update to the QAPP was approved on March 15, 2006.

100% Complete

Subtask 2.2: Select 12 or 13 sites to conduct water quality sampling. Maintain water quality monitoring equipment and collect water samples.

100% Complete

Subtask 2.3 TAES will obtain sampling locations and deploy in accordance with arrangements made.

100% Complete

Subtask 2.4 TAES will perform routine sampling, (grab sampling) at strategic locations within the Buck Creek watershed.

The following actions have been completed during this reporting period:

- a. TAES performed grab sampling at sites: 3, 4, 5, 6, 10A, 10B, 10C, and 11 on April 3; sites 3, 4, 5, 10A, 10A, 10C, and 11 on April 17. Other routine water samples were collected at sites 3, 4, 5, 10, and 11 on May 22; sites 3, 4, 5, 10A, 10B, 10C, 11, and 12 on June 5; sites 3, 10A, 10B, 10C, and 11 on June 13; and at sites 3, 10A, 10B, and 10C on June 27. No water was present at sites: 1, 2, 7, 8, and 9.
- b. Sampling will be continued through August 2006 in order to eliminate gaps in data between Phase I and II of the project; current funding is available for supplies.

95% Complete

Subtask 2.5 TAES will collect a minimum of 8 rain event/high flow grab samples from the sites over the course of the study.

The following actions have been completed during this reporting period:

- a. Rainfall event sampling occurred May 10 with samples taken at sites 3, 4, 5, 6, 10A, 10B, 10C, 11, 12, and 13.

100% Complete

Subtask 2.6 TAES will compile and analyze the sampling data. Data will be for informational and assessment purposes due to the limited data previously collected.

The following actions have been completed during this reporting period:

- a. The watershed survey was continued with the assistance of FSA agents in each of the counties.
- b. Daily, weekly, and monthly lab reports have been completed.
- c. Table 1 lists the *E. coli* counts for the quarter.

85% Complete

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

- The proposal for Phase II of the project has been sent to the U.S. EPA for their approval.
- Lucas Gregory was hired as a new Project Manager at TWRI and will be taking over management of this project from Kevin Wagner.

IV. Projected Work for Next Quarter

The following will be accomplished during the coming quarter:

- a. Data consolidation efforts will be continued.
- b. Biweekly will proceed as planned and rainfall event sampling will continue as opportunities arise.
- c. Land use data and livestock counts will continue to be collected from the Farm Service Agency's: Donley, Collingsworth, and Childress counties.
- d. A site visit will be scheduled for TWRI Project Managers and TSSWCB personnel.
- e. A 2-3 day trip will be planned to work on the final project report with TWRI Project Managers.

Appendix I:

E. coli data

Table 1: *E. coli* counts by site and date. Numbers with / denote duplicate sample count.

Site No:	11a	11b
2-May-06	114	83
9-May-06	NSC	NSC
10-May-06	<i>2010</i>	<i>1440</i>
22-May-06	50	150
05-Jun-06	300	190
13-Jun-06	20	110
27-Jun-06	NSC	NSC

Bold= rainfall event. Single sample of over 394 colonies maximum listed in italics./ - includes a duplicate sample

NSC- no sample collected

Appendix II:
Stakeholder Meeting Agenda

Buck Creek Bacterial Monitoring Project Annual Stakeholders Meeting

AGENDA

Tuesday, May 9, 2006 9:00- 11:00 a.m.
Community Center, 721 Robertson
Memphis, Texas

8:45-9:00

- **Sign In and Refreshments-** Coffee, Donuts, Soft Drinks

9:00- 10:00

- **Welcome and Introductions-** Curtis Scrivner
- **Buck Creek PowerPoint Presentation-** Phyllis Dyer
 - **History**
 - **Sampling Results by Site**
 - **Watershed Survey Efforts**
 - **Where we are now**
 - **Phase II Proposal**

10:00-10:15

- **Short Break**

10:15-10:45

- **Questions and Answers-** Curtis Scrivner, and others

10:45- 11:00

- **Closing Comments –** TJ Helton, Kevin Wagner and others

Please invite anyone who may have an interest in the Buck Creek study and its outcome.

**The room has been reserved beginning at 7:30 a.m. for any SWCD that would like to conduct their normal monthly meeting prior to this meeting.

