Bacteria Runoff BMPs for Intensive Beef Cattle Operations Agreement No. 68-7442-7-478

Quarter no. <u>1</u> From <u>10/1/07</u> Through <u>12/31/07</u>

I. Abstract

Work this quarter focused on (1) selecting the specific location for the three watershed sites; (2) laying out and constructing the berms around the three watersheds, (3) planting Tifton 85 in the watershed sites, and (4) beginning development and delivery of educational materials regarding bacteria runoff and BMPs for reducing it. Work next quarter will focus on (1) construction and installation of weirs at each watershed site, (2) installation of ISCO samplers at each watershed site, and (3) initiation of fence construction so that grazing treatments can begin in summer 2008.

II. Overall Progress and Results by Task

TASK 1: Project Coordination and Administration

Subtask 1.1: Preparation of progress reports.

The following actions have been completed during this reporting period:

a. No activity to report this quarter. The Year 1, Quarter 1 Progress Report will be submitted on January 15, 2008.

0% Complete

Subtask 1.2: Coordination of meetings 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:

a. On October 4th, the TWRI Project Manager and Texas AgriLife Extension Service Co-PI met at the Texas A&M University Farm to select the area to construct the watershed sites and discuss what was needed to get the sites set up.

10% Complete

Subtask 1.3: Submission of required financial forms every quarter (SF-272 and SF-269).

The following actions have been completed during this reporting period:

a. No invoices have been submitted to date. In January, an invoice for the billing period of 10/1/07-12/31/07 will be submitted.

0% Complete

Subtask 1.4: Development of the final project report within 90 days of project completion.

The following actions have been completed during this reporting period:

a. No activity to report this quarter.

0% Complete

TASK 2: Assess Bacteria Runoff from Intensively Managed Beef Cattle Operations

Subtask 2.1: Install three (3) watershed sites at the Texas A&M University Farm in Brazos County to evaluate un-grazed, moderately stocked, and heavily stocked irrigated pasture conditions.

The following actions have been completed during this reporting period:

- a. On October 5th, the TWRI Project Manager and the Texas A&M Assistant Professor of Soil Science met at the Texas A&M University Farm to further evaluate the sites for soil type and suitability for the project. Based on this meeting, the area for construction of the watershed sites was selected.
- b. On October 11-12, the TWRI Project Manager and Texas AgriLife Extension Service Extension Assistant surveyed and flagged the three watershed sites for the construction of berms.
- c. On October 23-26, berms were constructed around each watershed site and slope was altered so that each site would drain to the watershed outlet.
- d. Following berm construction, all sites were sprigged with Tifton 85.

20% Complete

Subtask 2.2: Maintain the three watershed sites and assess bacteria concentrations, runoff volume, and precipitation from each of the three (3) sites for a period of two (2) years.

The following actions have been completed during this reporting period:

a. No activity to report this quarter. This subtask will be initiated following the completion of Subtask 2.1.

0% Complete

Subtask 2.3: Evaluate the water quality data collected throughout the project in order to develop timely and up-to-date information for presentation to producers.

The following actions have been completed during this reporting period:

a. No activity to report this quarter. This subtask will be initiated following the completion of Subtask 2.1.

0% Complete

TASK 3: Technical Transfer

Subtask 3.1: Develop and deliver educational materials regarding bacteria runoff and BMPs for reducing it to agricultural producers.

The following actions have been completed during this reporting period:

- a. In September 2007, TWRI developed the website titled "Improving Water Quality of Grazing Lands." This website displays the efforts associated with this project and two related projects evaluating BMPs and developing education programs to address bacteria. It can be found at the following web address: http://grazinglands-wq.tamu.edu/index.php. The website was viewed by:
 - 19 unique visitors in September 2007
 - 39 unique visitors in October 2007
 - 15 unique visitors in November 2007
 - 31 unique visitors in December 2007
- b. The website will be continually updated as new data and information are obtained.
- c. On November 29, information on the project was provided to the Lone Star Healthy Streams Steering Committee (Attachment 1). This committee was very supportive of the ongoing efforts.
- d. On December 2, information on the project was provided to stakeholders at the Copano Bay TMDL Meeting in Refugio during the poster session prior to the meeting.

10% Complete

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

• N/A.

IV. Projected Work for Next Quarter

- Prepare and submit Year 1, Quarter 1 Progress Report.
- Submit an invoice for the billing period of 10/1/07-12/31/07.
- Continue installation of three watershed sites at the Texas A&M University Farm.
- Continue to develop and deliver educational materials regarding bacteria runoff and BMPs.

Attachment 1 - Lone Star Healthy Streams Steering Committee

Name	Organization	City	Email
Ben Weinheimer	Texas Cattle Feeders Assoc.	Amarillo	ben@tcfa.org
Bill Hyman	Independent Cattlemen's Assoc.	Lockhart	hyman@icatexas.com
Bill Steubing	Rancher (Plum Creek)	Maxwell	dsteubing@ncua.gov
Bob McCan	Victoria SWCD	Victoria	mcfadd@suddenlinkmail.com
Curtis Scrivner	Hall-Childress SWCD	Turkey	starrow@lyntegar.com
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