

Texas Water Resources Institute

Bacteria Runoff BMPs for Intensive Beef Cattle Operations Agreement No. 68-7442-7-482

Quarter no. 8 From 7/1/09 Through 9/30/09

I. Abstract

Good rains provided good grazing this quarter; however, rainfall amounts were not enough to produce runoff. Additional grazing treatments and collection of runoff will be conducted next quarter as conditions allow. Additionally, work will continue on development and delivery of educational materials regarding bacteria runoff and BMPs for reducing it.

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. The Year 2, Quarter 3 Progress Report was submitted on July 15, 2009.

68% 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 August 27, September 11, and September 28, AgriLife Extension and TWRI met to discuss project activities and schedule.

68% 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. As of September 30, 2009, \$25,738 or 34% of federal project funds had been expended.
- b. Progress of Allocations to each Department is as follows:
 - TWRI has expended 46.7% of their funds
 - SCSC has expended 0% of their funds

34% 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. Equipment installation has been completed and monitoring initiated on September 15, 2008.

100% 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. Maintenance was conducted on each watershed site on July 22, August 28, and September 30.
- b. Grazing treatments were conducted August 7-8 and August 12-19. The moderately grazed site received 52.33 AUD and the heavily grazed site received 104.66 AUD.

52% 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 runoff samples were collected this quarter.

52% 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 of 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:
 - 14 unique visitors in April 2009
 - 12 unique visitors in May 2009
 - 12 unique visitors in June 2009
 - A grand total of 908 unique visitors since September 2007
 - The website will be updated as new data and information are obtained.
- b. Texas AgriLife Extension Service (Extension) continued work on a PowerPoint presentation and resource manual for dissemination to the public.

68% Complete

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

- N/A

IV. Projected Work for Next Quarter

- Prepare and submit Year 2, Quarter 4 Progress Report.
- Submit an invoice for the billing period of 7/1/09-9/30/09.
- Conduct additional grazing treatments when conditions are favorable.
- Continue monitoring runoff.
- Continue development of educational materials regarding bacteria runoff and BMPs.