Texas A&M AgriLife Texas Water Resources Institute

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

Quarter no. 3 From 4/1/08 Through 6/30/08

I. Abstract

Work continued this quarter on constructing fences to control grazing on the three watershed sites and developing educational materials regarding bacteria runoff and BMPs for reducing it. Work next quarter will focus on completing (1) installation of weirs and ISCO samplers at each watershed site; (2) fences so that grazing treatments can begin in the fall; and (3) educational materials.

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 1, Quarter 2 Progress Report was submitted on April 15, 2008.

25% 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 June 19th, the TWRI Project Manager and Texas AgriLife Extension Service Co-PI met to discuss project activities, planned work and timelines, and evaluate Tifton 85 establishment at the Texas A&M University.

25% 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 the last billing period which ended on March 31, 2008, \$6,206.57 or 8% of federal project funds had been expended. In July, an invoice will be submitted for the billing period of 4/1/08 - 6/30/08.

8% 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. Fence construction continues and is expected to be completed next quarter.
 - Fences and gate locations were established during April, but lack of response from the Animal Science Department on drilling post holes for the fence has delayed construction activities.
 - Plans are to contact a third party vendor regarding drilling post holes so that construction may begin on the fences during the next quarter.
- b. Weed management has dominated bermudagrass establishment efforts, thus far.
- c. Weirs were ordered. Once the weirs are delivered, they will be installed and the ISCO samplers will be set up. We expect to complete this next quarter so that sampling can begin this fall.

25% 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:
 - 40 unique visitors in April 2008
 - 61 unique visitors in May 2008
 - 58 unique visitors in June 2008
- b. The website will be continually updated as new data and information are obtained.
- c. Information on the project was included in presentations to audiences in Victoria, Bosque, McClennan, Hamilton, Coryell, Henderson, San Augustine, and Wharton counties at educational programs
- d. Fact sheets and a presentation continue to be developed to deliver information on bacteria runoff and BMPs for reducing it to agricultural producers.
 - Substantial progress was made on a BMP "white paper" being developed

25% 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 3 Progress Report.
- Submit an invoice for the billing period of 4/1/08-6/30/08.
- Complete installation of three watershed sites at the Texas A&M University Farm.
- Complete development of educational materials regarding bacteria runoff and BMPs.