II. Overall Progress and Results by Task

**TASK 1: Project Coordination and Administration**

Subtask 1.1: Conduct quarterly TTVN 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. No activity this quarter.

   **62% Complete**

Subtask 1.2: TWRI will prepare electronic quarterly reports and submit them to the TSSWCB. All progress reports will also be provided to all project participants and placed on the project website maintained by TWRI.

The following actions have been completed during this reporting period:

   **62% Complete**
Subtask 1.3: Representatives from TWRI will attend meetings with the TSSWCB project manager and other meetings, as needed, to review project status, deliverables, etc.

The following actions have been completed during this reporting period:
   a. TWRI visits regularly via telephone with the TSSWCB project manager to discuss project status and any issues as they arise.
   b. The Project Manager from TWRI met with the Project Manager from TSSWCB and briefly discussed the progress that had been made this quarter.

   62% Complete

Subtask 1.4: TWRI will submit appropriate Reimbursement Forms.

The following actions have been completed during this reporting period:
   a. As of the last billing period which ended on May 31, 2009, $104,574.73 or 49.4% of federal project funds had been expended.
   b. An invoice will be submitted next quarter covering March - May.

   49% Complete

Subtask 1.5: TWRI will develop (Months 1-3), host and maintain (Months 3-36) an internet website for the dissemination of information on educational, monitoring and demonstration activities taking place across the Copano Bay watershed.

The following actions have been completed during this reporting period:
   a. The Copano Bay Water Quality Education website went online in August 2007. It can be found at http://copanobay-wq.tamu.edu/. Since the website went online, it has been viewed by a grand total of 726 unique visitors.
   b. This quarter, the website was viewed by:
      • 46 unique visitors in April 2009
      • 13 unique visitors in May 2009
      • An estimated 32 unique visitors in June 2009 but not added to the total
   c. The Extension Assistant has developed “A Guide to Good Horsekeeping”. Upon approval by the TSSWCB, this publication will be made into an interactive web document.

   62% Complete

Subtask 1.6: TWRI and Extension will develop a final report and submit to TSSWCB.

The following actions have been completed during this reporting period:
   a. No activity to report this quarter

   0% Complete

TASK 2: Compile Existing Information
Subtask 2.1: Extension will hire an Extension Assistant to compile existing information, develop education curriculum, and lead all outreach and education program efforts.

The following actions have been completed during this reporting period:
   a. Emily Moench was hired for the Extension Assistant position in August 2007.

100% Complete

Subtask 2.2: Extension will assemble and assess existing data on livestock, deer, and feral hog numbers and distribution in the watershed.

The following actions have been completed during this reporting period:
   a. The report was submitted to the TSSWCB for final approval and submission to EPA.

99% Complete

Subtask 2.3: Extension will investigate published bacteria loading coefficients from cattle and other livestock to determine the most appropriate coefficients for use in the Copano Bay watershed.

The following actions have been completed during this reporting period:
   a. The report was submitted to the TSSWCB for final approval and submission to EPA.

99% Complete

Subtask 2.4: Extension will perform a comparison of the bacteria levels present in Copano Bay to other coastal areas in Texas to evaluate the most realistic endpoint.

The following actions have been completed during this reporting period:
   a. The report was submitted to the TSSWCB for final approval and submission to EPA.

99% Complete

Subtask 2.5: Extension will perform an evaluation of the historical bacterial levels in Copano Bay to assess any potential trends or changes that have occurred.

The following actions have been completed during this reporting period:
   a. The report was submitted to the TSSWCB for final approval and submission to EPA.

99% Complete

TASK 3: Develop Bacterial Education Programs for Horse Owners
Subtask 3.1: The Extension Assistant will conduct a review of the literature to determine the state of current knowledge regarding the effects of horses on bacterial levels in water bodies and BMPs designed to minimize these impacts. Extension will assess and inventory education/training materials within Extension and related materials developed through similar efforts in other states addressing bacteria from horses.

The following actions have been completed during this reporting period:
   a. The Extension Assistant has searched internet sources, Extension sources, and environmental sources for information pertaining to livestock and the environment, manure management, pasture management, stocking rates, pathogenic nature of manure, and programs in place in other states.
   b. The Extension Assistant has chosen several existing Extension publications for distribution to horse owners concerning composting, small acreage landowner issues, pasture health, and other issues.
   c. Other compiling will be done as new reports are released or as existing information leads in new directions.

100% Complete

Subtask 3.2: Extension will facilitate the modification necessary to integrate existing materials from subtask 3.1 above into the education program.

The following actions have been completed during this reporting period:
   a. Existing Extension Service materials and websites of interest are being made available and referenced in the “Guide to Good Horsekeeping” materials and accompanying seminars.

100% Complete

Subtask 3.3: Extension will develop a horse management educational program that provides producers with state-of-the-art production technology training on fundamental BMPs and strategies which can be employed to protect and conserve water resources from bacterial and other NPS contamination originating from horse operations.

The following actions have been completed during this reporting period:
   a. The Extension Assistant has completed the DRAFT “Guide to Good Horsekeeping” horse owner BMP education booklet.
   b. TWRI has submitted the DRAFT of the “Guide to Good Horsekeeping” to the TSSWCB on July 3rd, 2009.
   c. The “Guide to Good Horsekeeping” is anticipated to be approved and ready for publication next quarter.

99% Complete

Subtask 3.4: Extension will integrate and coordinate the horse management educational program with the proposed FY06 projects, Lone Star Healthy Streams Program and Educational Programs Focused on Fecal Coliform Bacteria and Nutrient Runoff on
Dairy Operations in the Leon Watershed, to provide the state with a comprehensive program for addressing bacteria from the major sectors of agriculture.

The following actions have been completed during this reporting period:

a. No activity this quarter.

62% Complete

Subtask 3.5: Extension will develop and provide a certificate of completion, or other appropriate mechanism which enables individuals to take credit for participation in the education and training program.

The following actions have been completed during this reporting period:

a. The Extension Assistant is developing a small aluminum sign that owners can place in their barn or on their fence for implementing certain approved BMPs.

62% Complete

TASK 4: Education and Outreach

Subtask 4.1: Extension will conduct educational and outreach programs in the Copano Bay watershed. Extension will coordinate with local SWCDs, TAES, NRCS, and others to deliver and evaluate the educational program. Specific educational programs include:

a. Urban Rancher Programs for small landowner
b. Lone Star Healthy Stream Programs for cattlemen
c. Wildlife management programs for landowners
d. Horse management curriculum developed through this project for horse owners
e. General water quality education for the general public

The following actions have been completed during this reporting period:

a. On April 18th, Earth Day was held and 100 dog fecal pick up bags were passed out with the website address on them
b. Approximately 70 surveys on general water quality knowledge were completed

62% Complete

Subtask 4.2: Extension will conduct result demonstrations and associated Ag Tours to show changes in livestock behavior and estimated reductions in bacterial runoff resulting from implementation of various value-added BMPs to area landowners and producers. GPS collars will be used to track livestock movement in correspondence with implementation of various BMPs to demonstrate changes in livestock behavior.

The following actions have been completed during this reporting period:

a. No activity to report this quarter

62% Complete
Subtask 4.3: Extension will provide 1-on-1 assistance to landowners and producers on water quality issues and measures for improving them. When appropriate, Extension will facilitate communication between landowners and SWCDs and the NRCS to encourage conservation plan development and participation in available cost-share programs.

The following actions have been completed during this reporting period:
   a. No activity this quarter.

62% Complete

Subtask 4.4: Extension will distribute educational material and publications to landowners in the watershed through BMP exhibits, county programs, Ag Tours, and other educational programs.

The following actions have been completed during this reporting period:
   a. A general water quality awareness booth was set up on Earth Day and 100 dog fecal pickup bags were passed out and approximately 70 surveys on general water quality knowledge were completed.

62% Complete

Subtask 4.5: Extension will utilize local media to promote events, and publications to promote various BMPs to landowners and natural resource professionals.

The following actions have been completed during this reporting period:
   b. A booth was set up during Earth Day in order to promote and raise awareness to water quality needs.
   c. Approximately 100 dog fecal pickup bags were passed out with the Copano Bay Watershed website address.
   d. The “Guide to Good Horsekeeping” is anticipated on being approved next quarter where upon approval, multiple brochures will also be published promoting various BMPs for different practices.

62% Complete

Subtask 4.6: Utilizing participants’ surveys, Extension will evaluate changes in producer knowledge and awareness of important production and environmental issues.

The following actions have been completed during this reporting period:
   a. Approximately 70 surveys about general water quality knowledge were completed this quarter.

62% Complete

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

- N/A
IV. Projected Work for Next Quarter

- Prepare and submit the Year 3, Quarter 2 Progress Report on October 15\textsuperscript{th}.
- Update website as new information is obtained
- Complete the FINAL Task Two Report
- Publish the “Guide to Good Horsekeeping” upon approval from TSSWCB
- Attend TAMMI Short Course in Round Rock during September
- Upon approval to the “Guide to Good Horsekeeping” short courses will be implemented with the county agents