I. Abstract

This quarter, the Extension Assistant attended Bayfest to provide Outreach and Education for landowners within the watershed by informing them of practices that can potentially improve water quality. At this event 200 dog fecal pick up bags were handed out with the Copano Bay’s website on it. A flyer with a list of water quality websites was also made available. It is expected that the “Guide to Good Horsekeeping” will be reviewed by the TSSWCB and sent back next quarter for finalization and publication. Also next quarter, the Extension Assistant will attend: Responsible Stewardship for horse owners at the San Antonio Farm and Ranch Show; Coastal Bend Bays and Estuaries Program Annual Roundup; and a rainwater harvesting workshop at the South Texas Farm and Ranch Show. Also, the Extension Assistant will speak at the Recovering from Drought for Horse Owners on November 17th. Finally, the project website continues to be visited. Approximately 22 unique visitors a month and over 791 unique visitors have been to the website since September 2007.

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.

69% 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:
69% 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.

69% Complete

Subtask 1.4: TWRI will submit appropriate Reimbursement Forms.

The following actions have been completed during this reporting period:
  a. As of September 30, 2009, $126,106 or 60% of federal project funds had been expended.
  b. Progress of Allocations to each Department is as follows:
     • TWRI has expended 57% of their funds.
     • District 11 has expended 60% of their funds.

60% 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:
     • 21 unique visitors in July 2009
     • 21 unique visitors in August 2009
     • 23 unique visitors in September 2009
  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.

69% 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. This task is complete.

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. This task is complete.

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. This task is complete.

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. 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.

69% 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.

  **69% 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. No activity to report this quarter

  **69% 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

  **69% 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.

  **69% 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 at Bayfest and 200 dog fecal pickup bags were passed out with the project website on them
   b. Flyers were also available with a list of important water quality websites
   c. A poster was displayed at Bayfest

   69% 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:
   a. No activity this quarter.

   69% 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. No activity this quarter.

   69% Complete

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

   • N/A

IV. Projected Work for Next Quarter

   • Prepare and submit the Year 3, Quarter 3 Progress Report on January 15th.
   • Update website as new information is obtained
   • Complete the FINAL Task Two Report
   • Publish the “Guide to Good Horsekeeping” upon approval from TSSWCB
   • Speak at the Recovering from Drought for Horse Owners workshop Nov. 17
   • Upon approval to the “Guide to Good Horsekeeping” short courses will be implemented with the county agents
   • Extension Assistant will attend:
     i. Responsible Stewardship for horse owners at the San Antonio Farm and Ranch Show
     ii. Coastal Bend Bays and Estuaries Program Annual Round Up
     iii. A rainwater harvesting workshop at the South Texas Farm and Ranch Show