I. Abstract

This quarter, the Extension Program Specialist has been compiling information and educational materials for use in the LSHS program. First drafts of the feral hog and the horse manual are also complete and currently being reviewed. Progress on the dairy manual is continuing.

II. Overall Progress and Results by Task

**TASK 1: Project Administration**

Subtask 1.1: *TWRI will prepare electronic quarterly progress reports (QPRs) for submission to the TSSWCB. QPRs shall document all activities performed within a quarter and shall be posted to the project website and distributed to all project partners.*

The following actions have been completed during this reporting period:
   a. TWRI submitted Year 2, Quarter 5 Progress Report on April 11, 2011.

   **50% Complete**

Subtask 1.2: *TWRI will perform accounting functions for project funds and will submit appropriate Reimbursement Forms to TSSWCB at least quarterly.*

The following actions have been completed during this reporting period:
   a. As of June 30, 2011, $115,407 or 30% of federal project funds had been expended.

   **30% Complete**

Subtask 1.3: *TWRI will host coordination meetings, conference calls, or TTVN meetings with the TSSWCB Project Manager and SCSC at least quarterly to discuss project activities, project schedule, communication needs, deliverables, and other requirements. TWRI will develop lists of action items needed following each project meeting and distribute to project personnel.*

The following actions have been completed during this reporting period:
   a. TWRI, SCSC and TSSWCB met at TWRI on June 23 to discuss progress.

   **50% Complete**
Subtask 1.4: TWRI will work with AgriLife Extension to develop a Final Report.

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

  **0% Complete**

**TASK 2: LSHS Program Coordination**

Subtask 2.1: AgriLife Extension SCSC will hire an Extension Program Specialist responsible for carrying out all Subtasks for Tasks 2 and 3.

- The following actions have been completed during this reporting period:
  - a. Complete.

  **100% Complete**

Subtask 2.2: TWRI and AgriLife Extension will utilize the framework of the TSSWCB project 06-05 LSHS Project Steering Committee to establish a LSHS Program Steering Committee to direct this synergistic project, serve as the review panel for the educational materials developed through the project, and provide endorsement of the final LSHS Program. This LSHS Program Steering Committee will meet as frequently as needed, likely semi-annually.

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

  **50% Complete**

Subtask 2.3: The Extension Program Specialist will work with the Principal Investigators of the amassed body of work to compile the information and educational materials developed. This LSHS Program Development Committee shall meet as often as needed and serve to ensure that the Extension Program Specialist accurately captures and represents the species-specific information from the amassed body of work.

- The following actions have been completed during this reporting period:
  - a. Accumulation continues as the manuals progress.

  **50% Complete**

Subtask 2.4: The Professor/State Forage Specialist, with assistance as needed from TWRI, will work closely with Texas AgriLife Extension Service Regional Program Directors, County Extension Agents, Extension Specialists, and other Extension Leadership, as appropriate, to ensure that the LSHS Program is supported around the state to ensure delivery of this program upon completion.

- The following actions have been completed during this reporting period:
  - a. The TWRI Associate Director continues to communicate with Extension Leadership and other pertinent project partners.

  **50% Complete**
TASK 3: LSHS Program Development

Subtask 3.1: The Extension Program Specialist will compile the amassed body of work including, but not limited to, information and educational materials developed through TSSWCB projects 06-05, 06-08, 06-07, 05-06, and 08-07.

The following actions have been completed during this reporting period:
  a. The Extension Program Specialist continued to compile the amassed body of information and educational materials developed through relevant TSSWCB projects and others throughout the country. The database is available online, accessible from http://lshs.tamu.edu.

  50% Complete

Subtask 3.2: The Extension Program Specialist will work with the materials (subtask 3.1) and the Development Committee (subtask 2.3) to develop standardized educational manuals on bacteria issues and BMPs for addressing bacteria runoff from grazing cattle, dairy cattle, poultry, horses, and feral hogs.

The following actions have been completed during this reporting period:
  a. Horse manual is being reviewed by Ag Communications. The Feral Hog manual is under review and the Dairy Cattle manual has been started.

  50% Complete

Subtask 3.3: The Extension Program Specialist will work with the materials (subtask 3.1) and the Development Committee (subtask 2.3) to develop standardized educational presentations on bacteria issues and BMPs for addressing bacteria runoff from grazing and dairy cattle, poultry, horses, and feral hogs to be used for in-person LSHS Program delivery. These presentations should be based on and flow from the Resource Manuals (subtask 3.2)

The following actions have been completed during this reporting period:
  a. No activity to report this quarter. This will be completed as the resource manuals are completed.

  0% Complete

Subtask 3.4: The Extension Program Specialist will develop promotional materials to be used for LSHS Program delivery and to inform the public of the availability of the LSHS Program.

The following actions have been completed during this reporting period:
  a. LSHS brochure has been resent to the TSSWCB for comment.

  98% Complete

Subtask 3.5: The Extension Program Specialist will work with TDA and Texas Certified Crop Advisors Program to establish CEU credits for the educational program to encourage participation by landowners and crop advisors in the program.

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

  100% Complete
Subtask 3.6: The Extension Program Specialist will develop pre- and post- participant surveys to evaluate (1) changes in producer knowledge and awareness, (2) expected adoption of BMPs, and (3) any barriers to producer participation and successful implementation of the program to be used at in-person LSHS Program delivery events.

The following actions have been completed during this reporting period:
   a. The survey has been resent to the TSSWCB for comment.

   **98% Complete**

Subtask 3.7: The Extension Program Specialist, Professor & State Forage Specialist, Assistant Professor & District Agronomist at Overton, and the Assistant Professor & District Agronomist at Corpus Christi will pilot each of the five components of the LSHS Program at selected sites in East, Central, and South Texas. Watersheds selected for piloting of the LSHS Program shall be TSSWCB priority TMDL or WPP watersheds.

The following actions have been completed during this reporting period:
   a. The LSHS concept was introduced through presentations at the following dates and locals this quarter:
      - 4/7 Henderson County – 137 individuals
      - 4/13 Brazos County – 39 individuals
      - 4/20 Wilson, Karnes, Guadalupe, Bee Counties – 45 individuals
      - 4/29 Kaufman County – 40 individuals
      - 5/5 Burleson, Lee Counties – 45 individuals

   **50% Complete**

**TASK 4: Develop Interactive Website to Increase Access to LSHS Program**

Subtask 4.1: Using the latest appropriate technology, the Extension Program Specialist and TWRI IT Associate will work together to develop an interactive website to make the educational materials developed under Task 3 easily accessible by the public, landowners, county agents, soil and water conservation districts, decision makers, and others. The Extension Program Specialist will also evaluate the feasibility of providing CEUs for participation in online modules and if found to be feasible, will work to make those available online as well.

The following actions have been completed during this reporting period:
   a. The searchable database of journal articles and other educational materials relating to BMPs, bacterial removal efficiencies, and other information pertinent to the LSHS project can be found at [http://lshs.tamu.edu/research/bibliography](http://lshs.tamu.edu/research/bibliography). This database will continue to be updated as additional materials are found and the website will continue to be updated as Task 3 materials are developed.

   **50% Complete**

Subtask 4.2: The Extension Program Specialist will develop and provide information for the website to the TWRI IT Specialist and update this information quarterly. The number of unique visitors to the website will be tracked to assess its impact and reported in each QPR.
The following actions have been completed during this reporting period:


b. This quarter, the website was viewed by 19 unique visitors:
   - 85 unique visitors in April 2011
   - 81 unique visitors in May 2011
   - 85 unique visitors in June 2011

50% Complete

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

- Timely internal review and feedback of draft materials is essential for the Extension Specialist to compile the Best Manual Possible.

IV. Projected Work for Next Quarter

- Continue delivery of LSHS programs statewide
- Continue development of standardized educational manuals, presentations, and promotional materials on bacteria issues and BMPs for addressing bacteria runoff from grazing cattle, dairy cattle, poultry, horses, and feral hogs.
- Continue compiling information and educational materials.