

## Texas Water Resources Institute

### Development of a Synergistic, Comprehensive Statewide Lone Star Healthy Streams Program FY 09 CWA 319(h) TSSWCB Project No. 09-06

Quarter no. 4 from 7/1/10 through 9/30/10

#### I. Abstract

This quarter the Extension Program Specialist has been compiling information and educational materials for use in the LSHS program and formulating the layout for the standardized educational manuals. The Program Specialist has also been working with TWRI staff to work on website material and transition to the new website. The Program Development Committee met and discussed BMPs to include in the material.

#### 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 1, Quarter 3 Progress Report on July 15, 2010.

**8% 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 September 30, 2010, \$35,498 or 9.4% of federal project funds had been expended.
- b. Progress of Allocations to each Department is as follows:
  - TWRI has expended 17% of their funds
  - SCSC has expended 8.5% of their funds

**9% 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. On September 28, SCSC, TSSWCB, and TWRI met after the LSHS Program Development Committee meeting to discuss further action. It was decided the Program Specialists will follow up, by e-mail, with the specialists to better refine BMPs suggested at the meeting.
- b. Additionally, TWRI routinely communicates with the TSSWCB project manager and AgriLife Extension on project status and issues.
  - This quarter, TWRI participated in the July 22 TSSWCB Board Meeting and September 15 TSSWCB Work Session.

**30% 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. A LSHS Program Steering Committee Meeting has been scheduled for October 25 at 1:30 pm in Lubbock in conjunction with the Annual Meeting of Texas Soil and Water Conservation District Directors. Next quarter, the agenda will be developed and final preparations made. The development of a synergistic, comprehensive statewide Lone Star Healthy Streams Program will be discussed.
- b. AgriLife Extension and TWRI will also meet with the Ag Council on October 19 in Austin to brief the animal industry on bacteria issues in the state and the LSHS program being developed and seek their input and future endorsement of the program.

**20% 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. On September 28, the first meeting of the LSHS Program Development Committee was held at the TWRI headquarters in College Station. Attendance at the meeting included administrators Ron Woolley and Pete Gibbs with AgriLife Extension; Aaron Wendt, TJ Helton, Mark Cochran, and Mitch Conine with the Texas State Soil and Water Conservation Board; Kevin Wagner and Brian VanDelist with the Texas Water Resources Institute; dairy specialists Ellen Jordan, Sam Feagley, and Todd Bilby with AgriLife Extension; horse specialist Dennis Sigler with AgriLife Extension; poultry specialists Craig Coufal with AgriLife Extension and Daren Harmel with USDA-ARS; forage specialist Larry Redmon with AgriLife Extension; and wildlife specialist Jim Cathey with AgriLife Extension. The items discussed included the role of the TSSWCB in watershed protection across the state, the severity of bacteria impairments in Texas, the basis for the development of the LSHS program, the LSHS resource manuals, the LSHS program website, and top BMPs for each animal category. The committee was given the task of prioritizing the list of BMPs and identifying the top 5-10 for each animal category. The selected BMPs will serve as the foundation for each individual resource manual and each BMP will include detailed information on design, benefits, bacteria removal efficiencies (where data exists), cost, and economic impact of implementing the practice.

**25% 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. On September 28, the first meeting of the LSHS Program Development Committee was held at the TWRI headquarters in College Station. Attendance at the meeting included Pete Gibbs, AgriLife Extension Associate Agency Director, and Ron Woolley, AgriLife Extension East Region Program Director.

**20% 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 has begun compiling the amassed body of information and educational materials developed through relevant TSSWCB projects and others throughout the country. An intensive search of scientific literature was completed to locate research dealing with bacteria removal efficiencies from individual BMPs. Research was also sought on individual BMP design and relevance to beef cattle, dairy cattle, horses, poultry, and feral hogs. All literature was compiled into an EndNotes searchable database that includes the article citation, abstract, and article PDF. This database is being built into the LSHS website so that others can access it.

**20% 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. Draft layouts for 5 resource manuals were completed and presented at the first Program Development Committee meeting on September 28. Input was sought on design, layout, and usability.

**20% 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. No activity to report this quarter. Will be developed as BMP input is received from specialists.

**10% 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.

**10% 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. No activity to report this quarter.

**10% 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. No activity to report this quarter.

**0% 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. No activity to report this quarter. As Task 3 is completed, information will be uploaded to website.

**5% 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:

- a. Since September 2007, the website titled "Improving Water Quality of Grazing Lands" (<http://grazinglands-wq.tamu.edu/>) has been used to disseminate information on *Lone Star Healthy Streams* and related projects. A grand total of 1,056 unique visitors since September 2007.

- b. This quarter, the website was viewed by 37 unique visitors:
  - 1 unique visitors in July 2010
  - 14 unique visitors in August 2010
  - 14 unique visitors in September 2010
- c. Transition to a new website titled “Lone Star Healthy Streams” with the url of <http://lshs.tamu.edu> is in process. TWRI and SCSC met on August 27 to discuss and plan this transition from a project website to a resource website for agricultural producers, watershed stakeholder groups, and agency personnel.

**8% Complete**

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

- N/A

### **IV. Projected Work for Next Quarter**

- A LSHS presentation will be given to the Ag Council in Austin on October 19.
- 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 development of new LSHS website at <http://lshs.tamu.edu>.
- Continue compiling information and educational materials.