

**Texas AgriLife Extension Service
Texas Water Resources Institute**

Provide Assistance to Improve Water Quality in Hood County

FY 10 Federal Appropriated Funds

USDA-NRCS Agreement # 68-7442-10-495, AgriLife FAMIS Account #07-428540

TWRI Project Manager: Danielle Kalisek

Quarter no. 4 From 4/1/11 Through 6/30/11

Project Goals and Objectives

The goal for this project is to provide a mechanism to educate local stakeholders about water quality issues that are affecting Lake Granbury. This project will provide an assessment of existing and potential water quality threats related to on-going non-point source (NPS) water pollution within the Lake Granbury Watershed. The Texas Water Resources Institute (TWRI) and Texas AgriLife Extension Service will also assist BRA and TCEQ in developing a Watershed Protection Plan (WPP), aimed to improve and protect water quality within the Brazos River Basin. Educational information developed from this project will provide Federal, State and local decision makers with a variety of mechanisms that can be employed to prevent additional degradation of water quality in the watershed.

Key objectives of this project include:

- Holding public meetings to educate stakeholders and clients within the watershed about water quality and its protection
- Providing public educational programs to help achieve improved water quality
- Conduct training events on proper operation and maintenance of on-site wastewater treatment systems and collective facilities

Progress in Meeting Project Milestones and Output Commitments

Task, Deliverables, and Schedules

The Texas Water Resources Institute (TWRI) and the Texas AgriLife Extension Service continued on this year's project deliverables during the second quarter. Project efforts focused upon conducting educational/outreach events for local residents. Additional fact sheets are in progress.

In looking forward to the end of the project, Texas AgriLife Extension Service specialists and the local County Extension Agent will continue planning programs for homeowners, will distribute news releases, fact sheets and educational materials, will discuss using rainwater harvesting to control stormwater, and will construct a rain garden. Several new rainwater harvesting demonstrations and trainings are planned or in progress. A couple pet waste demonstrations are also in the planning stages.

The status of tasks, milestones and deliverables will be defined using the following terms:

Pending	Work has not started on the deliverable
Initiated	Work has started
Completed	The objectives were achieved and deliverables are finished
Deferred	Work has started, but further action is delayed pending other information, the completion of another objective, staff restraints, etc.
Ongoing	Work will continue throughout the term of the contract

Task 1 Education

Date	Status	Deliverables
12/31/10	Ongoing	1. Develop an informational fact sheet on the design of rain gardens for stormwater abatement.
9/15/10	Completed	2. Develop educational presentations regarding water quality in Lake Granbury and the identified best management practices outlined in the watershed protection plan.
6/30/11	Ongoing	3. Implement a best management practice demonstration project on site water management utilizing a rainwater harvesting system in the Lake Granbury watershed.
6/30/11	Ongoing	4. Develop a pet waste management demonstration in the Lake Granbury watershed.
6/30/11	Ongoing	5. Work on implementation of the Lake Granbury WPP in cooperation with BRA and TCEQ.
6/30/11	Ongoing	6. Hold informational meetings with the cooperation of the local AgriLife Extension agent, HOAs and civic organizations regarding BMPs to meet water quality goals detailed in the Lake Granbury WPP.
6/30/11	Initiated	7. Conduct on-site sewage facility training for continuing education of practitioners.
6/30/11	Ongoing	8. Continue to offer basic septic system maintenance programs for homeowners surrounding Lake Granbury and provide educational resources.

Comments:

- The informational fact sheet on the design of rain gardens for stormwater abatement was submitted to AgriLife Communications for editing and printing on April 26, 2011.
- We continue to work with BRA and TCEQ to facilitate implementation of the Lake Granbury WPP.

- We are planning to install a rainwater harvesting demonstration site in Granbury during the Master Gardener rainwater harvesting specialist training on July 13 and 14, using a 1,500 gallon rainwater tank obtained by our group.
- We will continue to distribute all previously developed and printed educational material to individuals in the Lake Granbury watershed.
- Pet waste management demonstration material has been purchased. We will now schedule a date to install the demonstrations.
- An informational sign to go along with the pet waste station has been designed and ordered. A PDF of the sign's design is attached.
- We have coordinated with the local county Extension agent to host a homeowner septic system training on the evenings of April 19, July 12, and September 19, 2011.
- A 2-day rainwater harvesting training has been scheduled for July 13–14, 2011. This training will teach participants about stormwater management through various rainwater harvesting techniques.
- Overview of Advanced Wastewater Treatment Systems, an 8 hour OSSF professional course, is scheduled for July 15, 2011. An advertisement brochure was mailed to approximately 350 OSSF practitioners in Hood, Somervell, Tarrant, Johnson, Erath, Parker, and Palo Pinto counties
- Homeowner OSSF course scheduled for July 12, 2011 at the Hood County Extension Office.
- Bruce Lesikar agreed to teach the Overview of Advanced Treatment Systems course for practitioners on July 15, 2011 at the Hood County Extension Office.

Task 2 Administration

Date	Status	Deliverables
10/10/10	Completed	1. Quarterly Progress Report
1/10/11	Completed	2. Quarterly Progress Report
4/10/11	Completed	3. Quarterly Progress Report
7/10/11	Completed	4. Quarterly Progress Report
10/10/11	Pending	5. Final Report

Comments:

- TWRI continues to update and distribute the one-page fact sheets as needed. The fact sheets identify project needs and goals and are used to gain stakeholder involvement and publicize project activity.
- TWRI continues to setup project meetings as needed/requested and regularly communicates with project members to ensure deliverables are being met and to be involved in project-related meetings. A team meeting was held May 17.
- The Institute continues to maintain a website specifically for the Lake Granbury Water Quality Project. The website can be accessed at: lakegranbury.tamu.edu.

Problems or Obstacles Encountered and Remedial Actions Taken

None to report at this time.

Work Planned for Next Reporting Period

Task 1: Education

Texas AgriLife Extension Service will continue working with BRA, TCEQ, the local County Extension Agent and local watershed stakeholder group to develop and present information on water quality. Texas AgriLife Extension Service has scheduled the following events listed below and are currently planning additional activities:

- Scheduling and planning for the discussion of rainwater harvesting as a means of controlling stormwater in Hood County at local public meetings will continue.
- Distribution of the printed fact sheets and developed educational materials will continue.
- Maintain communication with AgriLife Communications throughout the process of publishing the informational fact sheet on the design of rain gardens for stormwater abatement.
- We will offer a basic septic system maintenance program for homeowners surrounding Lake Granbury on July 12, 2011.
- On July 15, 2011 we will offer the Overview of Advance Wastewater Treatment course to OSSF practitioners in the Lake Granbury area.
- We will continue to work in cooperation with BRA and TCEQ on the implementation of the developed WPP.
- We are looking to install the pet waste management demonstration in the Granbury Hike and Bike Trail in July 2011.
- We plan to install a 1,500 gallon tank for rainwater harvesting at the Acton Nature Center in Hood County in July 2011.
- We will compile all results and work with the TWRI project manager to develop the project final report to be submitted in August.

Task 2: Administration

TWRI will continue working with BRA, TCEQ, NRCS and Texas AgriLife Extension Service in moving forward with project deliverables and publicizing the project to raise awareness of water quality issues within the study area. TWRI will continue to work with project participants to communicate about project status and reporting. TWRI will work with project participants to develop, compile, write, edit, and layout the project final report and submit it to NRCS in August.

Keep Lake Granbury Clean: Clean up after your pet!

Every dog poops, so don't forget to scoop.



When pet waste is left on the ground, it can be washed into rivers and streams during rain events. These rivers and streams eventually carry that waste to Lake Granbury.

Why is pet waste a problem?

- It contains harmful bacteria that can make water unsafe for human contact.
- It carries nutrients that cause excessive algae growth.



This demonstration is brought to you by the Texas AgriLife Extension Service as part of the Water Quality Program for Lake Granbury. See <http://lakegranbury.tamu.edu/> for more info.

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