

Southern Regional Water Program Coordination Project

The Project promotes regional collaboration, enhances delivery of successful programs and encourages multi-state efforts to protect and restore water resources. Ultimately, the project improves public access to the research, extension and education resources available through the Land Grant University System in the Southern Region and nationwide. The framework and key accomplishments of the Project are:



Regional Framework Facilitates Delivery of Land Grant University Resources

The Southern Region Water Quality Coordination Project is led by Water Quality Coordinators representing 1862 and 1890 institutions from each of the 13 states in EPA Regions IV and VI

Regional planning efforts identified 12 Priority Programs representing the most urgent water resource needs for agriculture and rural communities in the South. Regional teams are working to develop and deliver technology and resources to agricultural producers and rural communities across the South to enable them to better understand and respond to these critical water

Priority Programs

Agricultural Pollution Prevention Nutrient Management

Animal Waste Management Irrigation Water Management

Water Quality Education for Agricultural Producers Rural Environmental Protection

Drinking Water and Human Health
On-Site Wastewater Management
Community Wastewater & Solid Waste Management Rural/Urban Interface Landowner Education

Watershed Management Watershed Assessment

Watershed Restoration

Watershed Education Network

Nonpoint Education Network for Rural Community Decision Makers



Program teams are building products tied to national water quality themes such as the web-based **Drinking Water and** Human Health FAQ Database, which provides answers to more than 2,000 questions on numerous water quality-related topics. Extension agents can immediately direct clients to science-based answers to drinking water quality questions

The website is available through a link on the regional website (srwqis.tamu.edu) or at www.

Regional Conferences Promote Information Sharing and Resource Exchange

The Project targets integration of multi-state research, education and extension activities in watershed management and protection and pollution prevention.



Regional Water Conference ~ The Southern Region conducts a biennial water training conference. At the upcoming conference in Lexington, KY, October 23-26, 2005, sessions will focus on sharing successful programs and innovative approaches to solving water resource problems in agriculture, home economics, community development, and 4-H. More than 200 County Extension Professionals will be trained during the Conference. Through regional coordination, expertise is shared and duplication of effort in developing educational materials is avoided.



Water Quality Collaborative Conference for 1862, 1890 and 1994 Land-grant Institutions ~ The Southern Region coordinated the Water Quality Collaborative Conference in 2004, which facilitated sharing of water quality resources and expertise; established multi-institutional water quality work teams; improved collaboration and linkages among the 1890, 1994 and 1862 institutions; increased awareness of water quality work at 1890 and 1994 institutions; and strengthened linkages between USDA-CSREES, minority institutions and other agencies.



Partnerships ~ Significant effort is directed toward enhancing coordination with other federal and state water resource management agencies such as USEPA, USGS, and USDA agencies – ARS, NRCS and CSREES. Interagency Liaisons enhance multi-agency coordination and promote partnerships.

Regional Collaboration Improves Water Resource Protection and Restoration

•Regional Nutrient Management Summary ~ The Southern Region Nutrient Management Program Team coordinated a regional, multiagency (NRCS, EPA, state regulatory agencies, 1890s, 1862s) planning conference, which produced a comprehensive summary of southern region states' nutrient management regulations, education and training resources, and P-indices. State reports and the comprehensive summary are posted to http://srwqis.tamu.edu/ downloads/NutMgtCSREES.pdf. The team also is leading a national project partnership between CSREES and NRCS Headquarters to enhance uniformity of LGU nutrient management recommendations, and increase collaboration between agencies in conservation program implementation

•Watershed Academies ~ To date, students from seven states have attended the Southern Regional Water Program Watershed Academies: Principles of Water Quality Monitoring, Planning, and Restoration, and have learned to apply water quality and watershed management principles to understand and solve complex water resource problems. Three academies were offered in 2004-2005 and two additional academies are scheduled.



Summary of State Nutrient Management Information: CSREES Southern Region





•Master Farmer Program ~ The Water Quality Education for Agricultural Producers Program Team has developed a regional curriculum template patterned after the Master Farmer Program introduced in Louisiana and will offer a training seminar for the materials in January, 2005. Master Farmer training involves classroom instruction on environmental stewardship related to water regulations, conservation practices, and USDA conservation funding; attendance at Model Farm Field Days; and development of farm-specific conservation plans. The objective of the regional program is to extend the concept and training to additional states to help educate and encourage implementation of agricultural BMPs to improve water resources.

•A Regional Master Watershed Steward Program coordinated by Texas A&M and the University of Georgia, is being implemented ~ Increased understanding and adoption of appropriate BMPs and other restoration activities will be accomplished through education outreach and technology transfer via the Master Watershed Steward Program. Multi-disciplinary and multi-agency teams are being assembled to support watershed education resource materials development. Master Watershed Steward Partners include state natural resource agencies, the Land Grant Universities, Cooperative Extension Services, Water Resource Institutes, Sea Grant Programs and EPA, Watershed Steward Coordinators at the University of Georgia and Texas A&M University are working jointly to develop curricula, evaluation tools, and websites, and to further leverage 406 funding.

The project substantially improves public access to research, extension and education resources available through the Land Grant University System.

> •Southern Region Down-well Camera Team ~ The Team is using down-well cameras to supplement evaluation of the condition of private drinking water wells. Images obtained with a down-well camera identify problems and provide individuals with information necessary to repair their well and reduce the potential for contamination. The Team is producing a regional DVD of common well problems illustrated with footage from the cameras.





•Adoption and Sustained Use of Soil Testing as a Best Management Practice for Water Resource Protection ~ In one target area of Texas, nitrogen and phosphorus fertilizer application on agricultural land was reduced by over 4,176,049 pounds through intensive education and training programs. In addition to the environmental benefits on water quality from reduced nutrient loading, the estimated economic impact of the program totaled over \$1,002,820 in direct fertilizer cost savings. The Southern Region is beginning development of two training videos on the environmental benefits of nutrient management and the critical role of soil testing in recommending environmentally responsible application rates of fertilizer and lime.

Stream Restoration Training and Demonstration in the Southeastern USA has resulted in changes in state and federal stream mitigation policies so that a more effective natural channel design approach is emphasized. Over 1200 professionals have participated at 16 locations in 8 southern region states. Over 30 demonstration projects are complete, with funding provided by USDA, EPA, state agencies and local watershed organizations.

•Watershed Education Network ~ The regional Watershed Education Network develops and delivers watershed education curricula to effectively reach a variety of audiences. This year, the Network delivered multi-state Watershed Academies for local planners, extension agents, watershed managers, and state agency representatives; a multi-state 4-H water camp; and multi-state workshops providing training for local citizen watershed action groups, and Extension and Sea Grant professionals.





For more information contact: Mark L. McFarland, Project Director and Region 6 Coordinator (<u>ml-mcfarland@tamu.edu</u>; 979/845-2425)

Greg Jennings, Region 4 Coordinator (Greg_jennings@ncsu.edu; 919/515-2815)