



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:



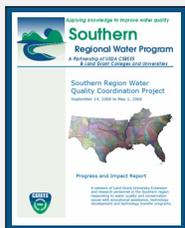
Regional Framework Facilitates Delivery of Land Grant University Resources

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 resource issues.

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 and 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.aces.edu/waterquality/faq/faq.htm

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 conference in Lexington, KY, October 23-26, 2005, sessions focused on sharing successful programs and innovative approaches to solving water resource problems in agriculture, home economics, community development, and 4-H. More than 150 water resource professionals were trained during the Conference. Through regional coordination, expertise is shared and duplication of effort in developing educational materials is avoided. Planning is underway for a 2007 conference in northwest Arkansas.



Lexington, KY
October 23-26, 2005



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



M.L. Farland, D. Devlin,
R. Hinkle,
D. Daniels, and C. Davidson

•**Regional Comparison of Land Grant University Soil Test Recommendations for Nitrogen, Phosphorus and Potassium** – To enhance uniformity of nutrient management recommendations, and increase collaboration between agencies in conservation program implementation, the Nutrient Management Team completed a national assessment of differences in soil test recommendations across state boundaries. The assessment is posted online at http://srwqis.tamu.edu/downloads/LGU_NNReccommendation_Summary_8.05.pdf and will support significant improvements in recommendations available to agricultural producers, land managers and state and federal land and water resource management agencies.

•**Watershed Academies** – To date, students from 14 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. Seven academies have been conducted to date.



•**Master Farmer Program** – The Water Quality Education for Agricultural Producers Program Team develops programs that help educate farmers and encourage voluntary implementation of agricultural best management practices to improve water quality. This regional program has resulted in the development of nutrient management plans for 928,500 acres and 89% of 2,047 participants indicated they received much or very much knowledge from the training, while 99% indicated they would recommend the training to others. Also, more than 75% of 2,000 ag producers indicated they had implemented BMPs as a result of the producer education programs.



• **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 is being accomplished through education outreach and technology transfer via the Master Watershed Steward Program. Multi-disciplinary and multi-agency teams 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 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. Well videos from throughout the region will soon be available from a central website.



•**Stream Restoration Training and Demonstration in the Southeastern USA** – Regional and multi-agency collaboration by the Watershed Restoration Team have improved the state of scientific knowledge and the practice of ecosystem restoration by developing, evaluating, demonstrating, and teaching effective techniques for restoring wetlands, streams, floodplains, and watershed functions. The Team has implemented restoration projects on 24,000 acres and 120 stream miles. Riparian buffer restoration projects have been implemented on 45,000 acres.



•**Adoption and Sustained Use of Soil Testing as a Best Management Practice for Water Resource Protection** – In target areas throughout the region, nitrogen and phosphorus fertilizer application on agricultural land was reduced by over 5,224,000 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. Land area impacted by nutrient management plans was 960,000 acres, and adoption of soil testing by agricultural producers increased by 60% on 97,000 acres.



•**Watershed Education Network** – The regional Watershed Education Network develops and delivers watershed education curricula to effectively reach a variety of audiences. The Network delivers multi-state Watershed Academies for local planners, extension agents, watershed managers, and state agency representatives; multi-state 4-H water camps; 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
(ml-mcfarland@tamu.edu; 979/845-2425)

Greg Jennings, Region 4 Coordinator
(Greg_jennings@ncsu.edu; 919/515-6791)