



## USDA-CSREES 2006 National Water Quality Conference

### Building Science into Watershed Management Decisions

The role of science in watershed management is critical in planning, implementing, restoring and monitoring. At the beginning of the watershed planning process, social science plays a major role in the development of a watershed group, ownership of issues and decisions for implementation must be made by the group to become long-term management decisions for water quality improvement. Watershed planning is most successful when local residents work together to determine critical issues in their watershed and the role they have in mitigating the environmental concerns.

As local watershed residents work toward a watershed plan, agency personnel become resource people to assist with the technical, educational and financial assistance to implement the plan. The selection of management practices that are effective in mitigating environmental concerns is based on research-based science with input from local residents on what they are willing to implement. Science is critical in the establishment of base line data and monitoring to determine the impact that occurs as the watershed management plan is being implemented. Through a combined effort of data collection, modeling and sampling, BMP evaluation can help determine the true impacts to the environment that we see when a watershed community works together to resolve watershed issues.

In watershed management the long-term economics of BMP selection within the watershed may be as important as the environmental changes that occur. The long term economic effects can affect not only individual producers but may cause a change in the economic base of a watershed community. These different aspects of science in watershed planning become critical for the long-term success of watershed planning, management and implementation.

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