



*2009 CSREES National Water Conference; St. Louis, MO*

**DEVELOPING WATERSHED RESTORATION AND PROTECTION  
PLANS:  
An Exercise in Integrating Research, Education and Extension**

Chris Obropta, Lisa Galloway-Evrard, Sandra Goodrow, Sean Walsh,  
Jillian Thompson\*  
Rutgers University; \* [jthompson@envsci.rutgers.edu](mailto:jthompson@envsci.rutgers.edu)

Abstract:

The United States Environmental Protection Agency (US EPA) has encouraged states to develop watershed restoration plans for their impaired waterways. Many states are creating these plans to be a detailed roadmap for achieving the pollutant load reductions that have been identified in the Total Maximum Daily Load (TMDL) Reports. These plans identify sources, quantify these sources, and recommend best management practices (BMPs) for reducing these sources. These plans also identify education and outreach programs that need to be put in place to promote behavior change among the stakeholders in the watershed to further reduce pollutant loading to the impaired waterways. Finally, these plans contain schedules for implementation, identify resources needed for implementation, and provide milestones that should be achieved to show that load reductions are being achieved.

The development of these plans provides an ideal opportunity for the Land Grant Institutions across the country to become more actively involved in watershed management in their state. For these plans to be completed in accordance with US EPA's recommendations, research, education and extension activities must be integrated. The Rutgers Cooperative Extension Water Resources Program has provided leadership in New Jersey in developing these plans. We conduct the research that is needed to identify the pollutant sources and quantify these sources. We form local action committees to provide input to the plan and help guide the BMP recommendations. As we are developing these plans, we identify watershed problems that immediately can be addressed by our State-wide Extension Specialists and County Extension Agents. They work together to deliver Extension programming to begin implementation of management practices while the plan is being completed. We are currently working on eight of these plans in watersheds with a wide variety of land uses and pollution problems. This poster will present the overall approach of integrating research, education and extension to develop these plans, providing real examples based upon the plans that the Rutgers Cooperative Extension Water Resources Program is currently preparing.

Impact Statement:

An integrated approach to developing watershed restoration plans provides a holistic method to improving water quality. Land Grant Institutions are encouraged to become more involved in watershed management and partnerships are formed between stakeholders, Extension Specialists, and County Extension Agents. Through the integration of research, education, and extension, the public is provided with the knowledge and skills necessary to implement better land use management tactics and consequently improve watershed conditions.

Category: Watershed Assessment and Restoration

Type of Presentation: Poster Presentation