

SERA-17 Phosphorus Management and Policy Workgroup:

Position Papers on Key Scientific Issues

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A law suit was filed in 2001 by the City of Tulsa Oklahoma against a group of poultry producers and a municipal wastewater treatment plant treating poultry abattoir waste. The focus of the suit was to protect drinking water supplies in the Eucha-Spavinaw Watershed. During the suit, there was often confusion about P terminology, the state of the science, and the significance of some P issues. As a result of a request from members of this lawsuit, and in anticipation of future litigation of this type, SERA-17 has mobilized to provide consensus-based scientific guidance and leadership.

During the 2004 annual meeting of SERA-17, representatives of Eucha Spavinaw BMP's Inc. and scientists from Arkansas and Oklahoma gave an overview of the Eucha-Spavinaw law suit. Following our annual meetings, these parties worked together to request that SERA-17 provide leadership regarding some key scientific issues that were raised as a result of this litigation.

Given the current need for science based guidance and leadership in the area of Phosphorus management, the Phosphorus Management and Policy Workgroup was established. The overall objective of this new workgroup is to provide consensus-based scientific recommendations for key issues involving agricultural P management and policy. This will be accomplished primarily through the development of science based documents aimed to guide P management and policy. These SERA-17 position papers will initially focus on the key scientific issues raised during recent lawsuits involving P management.

Members for the workgroup were solicited from the SERA-17 membership and each member was asked to chair a task force to address specific issues.

The Following Scientific Issues Were Addressed by Our Workgroup in 2004-2005:

1. **Predicting Edge of Field Phosphorus Losses – Models and Monitoring.** Task Force Leader: David Radcliffe, University of Georgia, dradclif@uga.edu
2. **Comparing Methods of P Analysis – ICP vs. Colorimetric Procedures.** Task Force Leader: Gary Pierzynski, gmp@ksu.edu
3. **The Importance of Soil Sampling Depth for P Assessment.** Task Force Leader: Peter Vadas, USDA-ARS, University Park, PA, Peter.Vadas@ars.usda.gov
4. **Phosphorus Indices for Predicting Risk of Phosphorus Losses.** Task Force Leader: Rory Maguire, North Carolina State University, rory_maguire@ncsu.edu
5. **Soil Phosphorus Threshold Levels.** Task Force Leader: Sam Feagley, Texas A&M University, s-feagley@tamu.edu