

## County part of statewide water runoff study

By Jennifer Nichols, NT Staff Writer

Published: Monday, November 7, 2005 8:20 AM CST

A question by a Monona County man about the size of waterways on some of his property led to a study about water runoff on fields with no-till or reduced till practices.

The pilot study is being done by officials from the University of Iowa (U of I) and Natural Resource Conservation Service (NRCS) in Iowa and within six counties. Cass is one of the six along with Fayette, Buena Vista, Buchanan, Fremont and Union Counties, and in Cass County property owned by Glen Smith and Al Wieremout is being used for the study.

According to Laurel Foreman, NRCS Hydrologist, the Monona County Landowner thought the waterways on properties were too big, and he used no-till and reduced till practices. However, Foreman said there isn't any science to prove that water runoff was more effective than other tilling practices, even though that is the general assumption.

Foreman said if the study proves that assumption, it would be beneficial for producers because waterways in field with no-till or reduced till practices could be designed to create minimum soil erosion. That could lead to more of a field being in production.

To test the theory, Foreman and U of I Associate Professor **Thanos Papanicolaou**, along with other associates, are setting up a rainfall simulator on properties in the different counties with no-till or reduce till practices. The simulator will then rain down on small areas of the property, and after the area is saturated with water, runoff would then be drained into plastic bottles. Officials would then determine how much runoff would drain into the bottles.

Foreman said the six counties were chosen because they have "benchmark" soils, or soils with different characteristics that can be found throughout the country. Different soils with different characteristics may behave differently, Foreman explained.

**Papanicolaou** said the study would continue through Spring of 2006, and a final report is scheduled to be complete in December of 2006. He calls the study "innovative," and hopes it can be used throughout the Midwest, after completion.