



## USDA-CSREES 2006 National Water Quality Conference

### Financial safety net for corn farmers: An emerging educational tool to increase adoption of nutrient and other BMPs

Surveys and case studies over the past 30 years have demonstrated that economic risk is a major barrier to farmer adoption of Best Management Practices (BMPs), including nutrient management, conservation tillage and Integrated Pest Management (IPM). For example, farmers are often reluctant to lower nitrogen, phosphorus and potassium applications to university recommendations. If the farmer or advisor miscalculates rates, or unusual weather causes the BMP to fail, yields and profits may decline. Since fertilizer costs are inexpensive relative to the potential loss, farmers "self-insure" by applying higher than recommended rates. The project partners have tested a BMP "net returns" fertilizer rate recommendation guaranty which provides a cash payment to participating corn farmers if the recommendation results in lower yields. This program allows farmers to test Land-Grant-developed BMPs on their own farm, without financial risk. The participant (or a sponsor) purchases a specially designed service agreement, applies university-recommended BMP rates, and applies additional fertilizer to a check strip. If a yield loss occurs on the BMP-fertilized acres vs. the check strip, and the value of the yield lost outstrips the fertilizer cost savings, the guaranty provides a payment to compensate for the loss. Corn farmers in five states have participated in research and development, with average fertilizer rate reductions of 24%. To date, the collaborators have developed financial risk protection programs for nutrient management, conservation tillage and corn rootworm IPM. In 2006, this program will be tested to provide a safety net for farmers fertilizing at below BMP rates to make even greater progress on improving water quality. Watershed managers are quickly recognizing these systems are highly cost effective in terms of setting up field-scale demonstrations and are now purchasing or cost-sharing the agreements for farmers.

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