



Miami Creek and Drexel Lake AgNPS SALT Project Final Report

Submitted by Bates County Soil and Water Conservation District

The Bates County Soil and Water Conservation District (SWCD) Miami Creek and Drexel Lake Agricultural Nonpoint Source Special Area Land Treatment (AgNPS SALT) Project was one of the original 12 pilot projects approved by the Soil and Water Districts Commission to begin work in the fall of 1999. The project area consisted of 80,000 acres on Miami Creek in northwest Bates County. There are two public water supply intakes within the project area, one for the City of Butler and one for Public Water Supply District #5. The watershed also contains two water supply reservoirs for these same entities. This project completed 83 percent of its goals and was well received by the people living and working in the watershed. This success was generated in large part by the district's desire to involve the local people in the planning and decision making process of the project. There were accomplishments made in the project that well exceeded some of the individual goals established for the project. The extraordinary accomplishment of particular goals involved practices that were part of a solution to the major concerns shown by the people living and working in the watershed. The practices that were not a part of those concerns were not as well utilized.

A town hall meeting was held to determine the concerns and needs of the people that have a stake in the watershed--those who live and work in it. These concerns were also prioritized by these same people. From that meeting, a call was put out for those interested in forming a steering committee and that committee was very active in the development of the Miami Creek and Drexel Lake AgNPS SALT proposal. The common thread leading to the success of this project was the people-- from the town hall meeting to the steering committee to the involvement of the local vendors.

The project was preceded one year with an information and education program through an Environmental Protection Agency section 319 grant. This proved to be a very good partnership, as the demonstration farms and field days plus various workshops helped the district inform and educate landowners and operators of best management practices (BMP's), while spreading the word of incentives available through the AgNPS SALT project. Bates County SWCD also used the 319 grant to work with local vendors and to hold a special workshop to inform them of what would be required to fulfill the requirements of the practices that participants would be involved with. Involvement of the local people by the Bates County SWCD, the assistance and direction of the AgNPS SALT steering committee, and the information and relationships developed with local vendors, generated one of the most successful "word of mouth" campaigns ever generated by Bates County SWCD.

This was evident by tracking projects with a Geographic Informational System program known as Arcview. The 319 demo farms and practices used by AgNPS SALT participants were plotted, and it was very interesting to see the high amount of activity located around the demo farms. Bates County SWCD believes this is a result of field days conducted and the enthusiasm of the demo participants themselves.

The overall goal of the Miami Creek and Drexel Lake AgNPS SALT project was to reduce the amount of nonpoint source pollution, such as atrazine, nitrogen, phosphorous and fecal chloroform, from reaching the tributaries and reservoirs of the watershed. There were four objectives established in order to reach this goal. Objective 1 was to develop public and landowner awareness of agricultural non point source pollution by conducting education and information meetings. Objective 2 was to improve water quality by reducing runoff of commercial chemicals and nutrients by 40 percent through implementation of BMPs. Objective 3 was to reduce animal waste and associated nutrient runoff by 40 percent through implementation of BMPs. Objective 4 was to improve the public water supply by reducing sediment loads by 40 percent through implementation of BMPs.

Bates County SWCD turned their attention to the implementation of BMPs and understands that every BMP that was applied to the land was beneficial to the water quality of the watershed. The district offered incentives for 12 BMPs. The 12 BMPs offered, plus the acres completed and the percentage of goals completed, follow:

Pest Management	12,191 acres	89 percent
Nutrient Management	17,353 acres	126.7 percent
Filter Strips	86 acres	171 percent
Field Borders	28 acres	56.4 percent
Stream & Waterbody Protection	30 acres	59 percent
Pasture & Hayland Management	5,886 acres	109 percent
Planned Grazing Systems	2,534 acres	71.2 percent
Waste Treatment Lagoon	0	0 percent
Conservation Tillage/No-till	4,424 acres	129.2 percent
Residue Management	1,573 acres	15.3 percent
Cover & Green Manure Crop	0 acres	0 percent
Conservation Crop Rotation	427 acres	42.7 percent

These BMPs were all used in a total resource management approach to conservation planning and implementation with the realization that usually not any one practice will solve a nonpoint source pollution concern but that it will likely require the implementation of multiple BMPs to positively address a concern.

An item that the SWCD is very appreciative of is the opportunity to have worked with the Food and Agriculture Policy Research Institute (FAPRI). The district had the privilege of working with FAPRI to develop environmental watershed models. FAPRI is well known for their economic modeling, but this was some of the first environmental modeling work done by FAPRI in Missouri. A panel of farmers and agricultural vendors was selected and with information

obtained through extensive interviews with this panel, a typical farm for the Miami Creek Watershed was created. This, along with an in depth look at the land use and crop history of the watershed, helped the district gauge what impacts the application of BMPs had on the watershed.

Again, the Bates County SWCD considers this a very successful project. The district has seen the continuation of many BMPs even after the incentives were no longer there. This is a good thing. The district strongly believes that the success of this project was due to the involvement of the local people. Giving them the opportunity to be a part of the solution is the most desired approach and can result in a positive outcome.