

## **Project Overview**

Intern: Joel Stenberg  
Major: Biological Systems Engineering  
School: University of Nebraska

### **Summer Projects**

This summer's projects included performing whole farm nutrient assessments at agricultural producers in Dawson County, assisting with irrigation research to provide new information to producers, and educating producers about pollution prevention.

### **Agricultural Assessments**

Five agricultural producers were visited to find ways to decrease the amount of nutrients applied to the soil and to assist with getting information for permitting. The conclusions from the assessments recommended reductions in commercial fertilizer use and manure application. The proper application of manure will also reduce runoff and minimize water loss in the fields through no and ridge tillage. The reduction of commercial fertilizer used would save the producers money and help prevent environmental pollution of surface and groundwater from the fertilizer nutrients. When the entire supply chain is evaluated, the recommendations will reduce the environmental costs of producing unneeded commercial fertilizer.

### **Education**

During the summer of 2005 many agricultural producers were introduced to the positives of pollution prevention. A total of **over 50 people** heard about pollution prevention. Although, only one of the presentations was a formal one, many producers were visited with in an informal manner. The informal way appeared to actually be more effective as it led to more opportunities to answer specific questions than the formal presentation.

### **Results**

The results of the summer internship were very focused on assisting agricultural producers. The results of the work show that there is a potential savings in commercial fertilizer use and manufacture of **\$52,150** and **1,224,473kWh/yr**.