



Freeborn County Soil & Water  
Conservation District  
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## With Climate Change Comes New Technologies and More Studies on Land Use

Over the past few years there have been extensive studies taking place within the Winnebago Watershed. Many are probably wondering where that even is. Have you ever heard of Bear Lake, State Line Lake, or even Conger or Emmons? They are all located in the Winnebago Watershed. In the end everyone has the same goal in mind. What can we do for the land and water quality to leave it better than we found it for generations to come? What if we are already doing everything we can already be doing? The WRAP's will hopefully give us those answers to know what still could be improved.

WRAPS is an acronym for Watershed Restoration and Protection Strategies. It is a report created by the Minnesota Pollution Control Agency (MPCA) that shows protection strategies that were developed and could be implemented in the watershed. Water monitoring is completed, and the data is assessed to determine the water quality throughout a watershed. Best management practices (BMPs) are then determined on what could best suit the watershed and put into the WRAPS report.

The Freeborn County Soil and Water Conservation District (SWCD) has been working with landowners in the watershed to implement BMPs to improve water quality and land management activities. As many practices have been implemented within the watershed, there is one practice that is a fairly new technology that is turning some heads. Controlled drainage is a great way to hold water in the field available to the crops in the field. Larry Bidne who lives near Emmons has been using reduced tillage on acres he farms. Larry recently decided controlled drainage would be beneficial on a field he rents just West of Bear Lake. The area is very sandy, and the water table is regulated by the lake level. So, with a wet season a controlled drainage system may be used more for minor flood reduction to the extent which it wouldn't flood the crop versus in a dry season to hold as much water back as possible to help with the success of the crop, but also provide nutrient reduction.

Controlled drainage systems are inexpensive to install depending on the existing tile system that is in place. How it works is there are water control structures installed on the tile lines which are usually the mains of the tiles systems. In the water control structures there are boards that control the water level throughout the soil profile. Structures are usually placed near the edges of fields, so they are easy to farm around, but also easier to access during the growing season to control the water level. If you are interested in installing a controlled drainage, but don't know if it will work for you stop by the Freeborn County USDA service center to visit with the SWCD staff.

What else has the SWCD been doing in the watershed? Well there have been tillage transects completed yearly. The transects included collecting data on the crop planted, crop residue type, tillage type, crop residue percent, and any special feature noted in the field such as maybe a wet spot, tile intake, soil erosion, or wetland restorations. The SWCD also conducted many one on one interviews with landowners, land renters, and other county entities to gather information on the watershed we otherwise wouldn't have known. Information was consolidated to find trends or things that stuck out in the study. The SWCD also wanted input on what their priorities were for the watershed moving forward. A few public meetings over the past few years were held to inform landowners and land renters of what was going on in the watershed. The SWCD continues to work with interested landowners and renters on various projects in the Winnebago Watershed.

So now what? The WRAPS is near completion and the One Watershed One Plan (1W1P) planning process is ramping up in the Winnebago Watershed along with the Shell Rock River Watershed (these two watersheds will be combined for the planning process only). What does this mean for the Watershed? The 1W1P is a program to develop a comprehensive watershed management plan to align planning processes on a watershed basis. The WRAPS report will be used in creation of the 1W1P. The 1W1P will prioritize areas for future funding in the watershed. The SWCD has funding available for many BMPs currently. If you have any questions or to see if you may be eligible for funding visit the Freeborn SWCD located in the Freeborn County USDA Ag service center at 1400 West Main Street Albert Lea, MN 56007 or call 507-373-5607 x 3.

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