

South Branch Root River Watershed Project  
March 8, 2007 Meeting Notes

In attendance: Stafford Hansen (Fillmore Co. Commissioner), Rich Biske (The Nature Conservancy), Brian Hazel (Fillmore SWCD Board, farmer), Kayla Soland (Greenfield Ag), Andrew Vorwerk (Vorwerk Custom Pumping), Jerome Hildebrandt, Dave Wall and Lee Ganske (MPCA), Chuck Amunrud (Fillmore Co. Commissioner), Jeff Weiss (DNR Fisheries-Lanesboro), Jerrold Tesmer (Extension), Mark White and Warren Netherton (Forestville/Mystery Cave State Park), Adam Birr (MDA), Jeff Green (DNR Waters- Rochester), Donna Rasmussen (Fillmore SWCD)

Manure management planning tool: Dave Wall, MPCA, explained the new manure management planning tool designed to be easier for farmers to use. This is in response to the need for manure management plans for those that receive federal cost-share funding but are not required to have plans under the state feedlot rules. The tool was completed in 2006 and is intended to help the farmer get the best use of the nutrients in the manure and meet state setbacks. A full blown manure management plan is needed if the operation is over 300 animal units, so most operations under 300 AU do not need a plan. The benefits of manure management planning include up to an 80% reduction in fertilizer costs and the protection of water quality. There are five parts to the tool: 1) calibration of the spreader to know how much manure is being applied per load; 2) manure analysis which is required once every 3 years for all operations over 100 AU; 3) crop nutrient needs for nitrogen and phosphorus determined by doing a soil test; 4) environmental setback requirements; and 5) tables showing average manure nutrient concentrations and crop nutrient needs for various rotations. The rules allow for 20% flexibility if soil conditions justify it. A different plan is needed if the source of the manure changes or a different spreader is used. The American Farmland Trust BMP Challenge guarantees an economic return if following U of M rates.

MN Department of Ag watershed modeling with the University of Minnesota: Adam Birr from MDA will utilize a portion of \$800,000 in Clean Water Legacy funding allocated to MDA for research to inform the TMDL process. The funding will be used for watershed modeling software to evaluate the effect of BMPs on water quality and quantity. Because of the data available for the South Branch, it was chosen as one of the locations for the study along with the LeSueur watershed. The modeling will help determine where the pollutant loading is coming from and will help identify the practices that help to meet water quality goals. The model, called SWAT for Surface Water Assessment Tool, was developed by the USDA. It allows short term evaluation of practices and their effects, but it does not replace on-the-ground data collection. The model has been used for over 20 years nationally but has had limited use in Minnesota. It can simulate water movement, sediment movement, crop growth, and nutrient cycling, and help determine the sources of the pollutants. The South Branch has the necessary data for use of the model: good long-term water quality data (more than five years), soils data, crop residue data, land use inventory, and the farmer survey information from the MDA FANMAP interviews. On April 1<sup>st</sup>, a U of M post-graduate student will begin working on the model. Winona State Water Resources Center is also assisting with stream channel surveys which provide additional data for the model. Monitoring sites are being added in the watershed, two on JD #1 and a spring monitoring site in the State Park. New equipment is being added to the Forestville monitoring station to collect additional information and make the real-time data available by phone.

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DNR stream survey data and how it is being used: Jeff Weiss is compiling and analyzing many years of stream survey data, some of which is from streams in the watershed project area. This includes historical trout data for the South Branch just upstream of the park and Forestville Creek. Annual sampling is done every fall. In the South Branch, a sharp decline has been seen from 2000 until now, which seems to be linked to the timing of flooding when the trout are hatching. Forestville Creek used to be stocked but that was discontinued in 2005. Brown trout adults have shown natural variations in numbers, but since 1970 have been increasing to a peak in 2002. It is unknown whether the fluctuations are caused by temperature changes, flooding or other factors. Macroinvertebrate data and stream channel data are being collected along with other monitoring on the streams, which are also helping to build the database. We need to remember that it takes longer to improve conditions than to degrade them.

Updates:

Educational opportunities planned for watershed landowners include a stream ecology class on March 22 at Kingsland High School as part of their Community Education series. Karen Terry, water resources educator with Extension, and Jeff Weiss will be teaching the class. A recognition event for citizen stream monitoring volunteers will be held prior to the class and the volunteers are invited to attend the class. A series of workshops is planned on forestry starting in June and running through February of next year. A tentative schedule is to hold a workshop on insects and diseases in June, tree identification and forest wildlife on September 15 at Forestville State Park, tree planting on October 6 at Ostrander, and financial aspects of woodland ownership in February.

The February 8 estate planning was well received by the few who attended. Unfortunately, it was a very cold night which probably affected attendance since many of those most interested may not have wanted to go out on such a cold night. Five landowners attended. The information was very good.

There hasn't been much headway in identifying a site for a wetland restoration in Mower County. The owner of the most desirable site has not returned phone calls after the financial information was sent to his farm manager. Two other landowners have been contacted about potential sites, but there has not been any response yet.

Mower SWCD is promoting buffer programs (CCRP and CREP) along JD #1 so that they can be signed up before the fields are planted. We are looking at ways to utilize our grant funds to enhance the payments for the buffers.

Quotes are being gathered from several farm management consultants for the grazing economic analyses. The County Board requested the quotes after realizing that the contract amount (>\$10,000) required more than one quote. Those should be submitted and ready to present to the county board by March 13.

The spring newsletter will go out in April. Suggestions for articles are needed.

Nitrate clinics are being scheduled around the county. One will be held in Spring Valley Wednesday, March 14 from 4 to 6 p.m. at city hall.

Jeff Green reported that the Legislative Citizens Commission on Minnesota Resources awarded a grant for \$265,000 for dye tracing, some of which will be done in the watershed.

The meeting adjourned at 8:45 p.m.