



Studying Conservation from Field to Stream

August 2016 Snapshots

The Root River Field to Stream Partnership (FSP) has been working in three small subwatersheds of the Root River (Bridge Creek, Crystal Creek and South Branch Headwaters) to study nutrient and sediment loss from agricultural fields and measure the effectiveness of conservation practices. The FSP is one of the most comprehensive and intensive studies of its kind in the upper Midwest.

The Root River FSP is a cooperative project between several groups and agencies including the Minnesota Department of Agriculture, Fillmore, Root River, and Mower SWCDs along with local farmers, several agricultural groups, and the Nature Conservancy.

This study has been conducted over six years with intensive baseline monitoring by staff from the Fillmore and Mower SWCDs which is managed by the Department of Agriculture. Information collected will help provide a comprehensive framework for evaluating and guiding future implementation activities. The study worked with local landowners to build on and evaluate existing conservation practices. Results gathered throughout this period identify which conservation practices are practical, best suited for conditions, and have the greatest potential for improving water quality.



Public meeting kickoff event in Fountain (April 2015)

The implementation of these conservation practices is becoming a reality thanks to over \$1 million in funding from BWSR's Clean Water Fund grant programs and a special allocation of EQIP funding from the USDA NRCS Mississippi River Basin Initiative (MRBI).

According to Donna Rasmussen, Fillmore SWCD Administrator, "FSP is helping to fill a longstanding gap in our understanding of what is running off the land and how that affects the downstream watershed and how BMPs can be effective in reducing what runs off to improve downstream water quality."

Excess sediment has been identified as a primary cause of water quality impairments in the Root River. The long term goals of the implementation phase include a 12-20% reduction in phosphorus and nitrogen loading, a 40% reduction in sediment, and a reduction of in-stream pesticides. While the three subwatersheds are smaller in scale, the information gathered and the conservation delivery approach used can be applied across the Root River watershed and throughout southeastern Minnesota.

All of these goals will help improve the health of Root River which is located in the Lower Mississippi River Basin of Minnesota and is home to two state parks. The area offers a number of activities such as canoeing, fishing, kayaking, biking, bird watching, and hiking on the 60-mile Root River trail system.