

Mustinka Watershed Assessment  
Press Release #3  
Watershed Restoration and Soil Health

In the words of Franklin Delano Roosevelt, “The Nation that destroys its soil destroys itself.” This quote was written in a letter to all State Governors during the Great Depression. Seventy-five years later, the first global soil week was celebrated in December 2012. The week served as a poignant reminder of the global importance of soil to ecology, culture and commerce.

The Bois de Sioux Watershed District recognizes soil health as a critical ingredient in developing its long term watershed restoration and protection plan. Press releases, radio broadcasts, workshops and internet posts at [twitter.com/BdSWD](http://twitter.com/BdSWD) will facilitate community members coming together to learn about and address soil health.

Organic matter is a key outcome of building soil health. Conventional wisdom was that little relationship existed between soil water holding capacity and organic matter, but current research has shown a direct relationship. A 1% increase in organic matter results in 20,000 to 25,000 gallons of available soil water storage per acre. This means that with controlled drainage you can optimize water needs for both spring melt and summer drought.

Soil organic matter is the driver for physically and biologically restructuring soil. A good soil structure not only establishes the soil sponge that holds water, but also allows percolation so excess summer rainwater infiltrates, rather than running off and taking valuable soil with it.

So what about the biological restructuring? Organic matter is the lifeblood of soil microorganisms, which hold and slowly release nutrients. Healthy soils naturally create their own fertilizers. More and more real life examples are showing that the cost to build natural soil health is less costly than adding fertilizer. Soil health is our greatest economic and environmental asset.

There are several ways to increase soil health. Leaving crop residue on the fields in the fall along with utilizing no-till practices increase organic matter in soil. Pasturing of cattle on harvested row crops fields and including cover crops as part of the rotation also provides long-term benefits to sustaining healthy, productive soil.

This message is part 3 in the ongoing ‘Health of the Valley Campaign’ that is made possible by the Bois de Sioux Watershed District, the Minnesota Pollution Control Agency and the Red River Basin Commission. Once again look for information at [twitter.com/BdSWD](http://twitter.com/BdSWD).

Thank you.