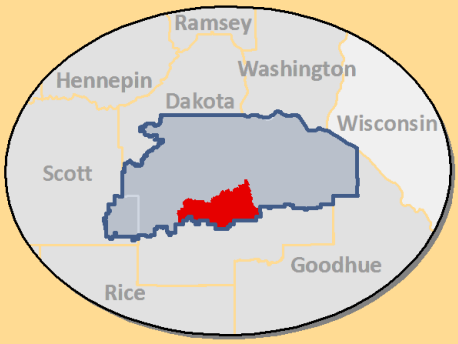
Vermillion River watershed
reflecting life

How can you improve local waters?

South Branch Subwatershed

South Branch Subwatershed



Includes:

- Northeastern Eureka Township,
- Northern Castle Rock Township,
- Northwest Hampton Township,
- Southeastern corner of Empire Township
- Southwestern corner of Vermillion Township,
- City of Hampton, and
- South Branch and all of its tributaries.

Strategies for a healthy subwatershed

The land area around the South Branch (and smaller streams that run into it) make up the South Branch Subwatershed. The South Branch Subwatershed (shown in red on map, left) is part of the Vermillion River Watershed (shown in blue). Land and water in this area drain to the South Branch.

The South Branch Subwatershed is primarily rural and agricultural. It is planned for agricultural use in the future. Over many years of agricultural production, landowners have altered the land to expand, improve crop yields, and drain soggy fields.

These land-use changes also altered the natural flow of water, allowing rain water to move more quickly from where it falls. Agricultural runoff carries pollutants such as sediment, nitrate, and *E. coli* bacteria to rivers and streams.

Practices that slow down stormwater and soak up the rain can improve water quality. Practices include grassed waterways (to slow water and reduce erosion), restored wetlands, water and sediment control ponds (to hold stormwater, remove pollutants, and let water soak into the ground), and cover crops (to hold soil in place, increase organic matter, and retain nutrients).

Healthy land and water resources depend on everyone. Find out more about what you can do to improve the South Branch Subwatershed's water resources.

Project Highlight

Dakota County Agricultural Society Native Prairie Restoration

In 2012, the Dakota County Agricultural Society (Fair Board) and several local partners permanently protected a 210-acre property at the headwaters of the South Branch. More than 60 different species of native wildflowers, 25 different species of native grass, and 2,000 trees were planted on the site. The native prairie is a unique outdoor education facility for residents of Dakota County.

Vermillion River Watershed Joint Powers Organization
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The Vermillion River Watershed encompasses an area of approximately 335 square miles, including portions of two counties and all or portions of 20 cities, towns, and townships. The main stem of the river begins in southeastern Scott County in New Market Township flowing east through central Dakota County, passing over a waterfall in the City of Hastings, and then discharging to the Mississippi River both through a northerly flowing outlet near the City of Hastings as well as through a southerly flowing outlet near the City of Red Wing, Minnesota.

Best Management Practices (BMPs) for the South Branch Subwatershed

What are the water-quality issues?

- *E.coli* bacteria in streams
- Excess sediment in streams
- Concern about having enough groundwater for future irrigation.
- Nutrients (particularly nitrate) in streams

What are we (and partners) doing?

- **Wetland restoration** to build stormwater storage, filter pollutants, prevent flooding, and provide habitat.
- **Cost-sharing conservation buffers** through federal and state programs.
- **Piloting an irrigation scheduling program** to provide landowners with services of a University of Minnesota Extension irrigation specialist to find optimal irrigation effectiveness.
- **Restoring a Minnesota Department of Natural Resources aquatic management area** at the confluence of the South Branch and the Vermillion River.

What can you do on the farm?

- **Install a grassed waterway**, a vegetated channel designed to move surface water across farmland without causing soil erosion.
- **Install water and sediment control basins** to collect sediment and hold water until it seeps into the ground.
- **Keep livestock out of streams** and properly manage manure to reduce bacteria loads.
- **Protect or restore wetlands** to improve stormwater storage, pollutant removal, and flood resilience.
- **Use cover crops** on cropland when the soil would otherwise be bare to reduce erosion and runoff pollutants. Common cover crops in Minnesota include rye and other small grains.
- Follow University of Minnesota Extension's best management practices for **nitrogen use**.

Visit our website for more information:
www.vermillionriverwatershed.org