



Capital Improvement Project

Farmington: North Creek Channel Rehabilitation



After

This restored stream meander was planted with native vegetation stabilizing the stream banks, preventing erosion, and providing habitat for wildlife.

A project completed cooperatively between

- City of Farmington
- Dakota County Soil & Water Conservation District
- Vermillion River Watershed Joint Powers Organization

Put the bends back into North Creek to reduce erosion

Decades ago, North Creek, a tributary of the Vermillion River flowing through Farmington, was straightened. However, a creek's natural curves or meanders reduce the water's energy, slow the stream flow, and reduce erosion.

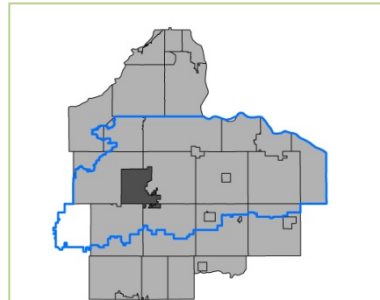
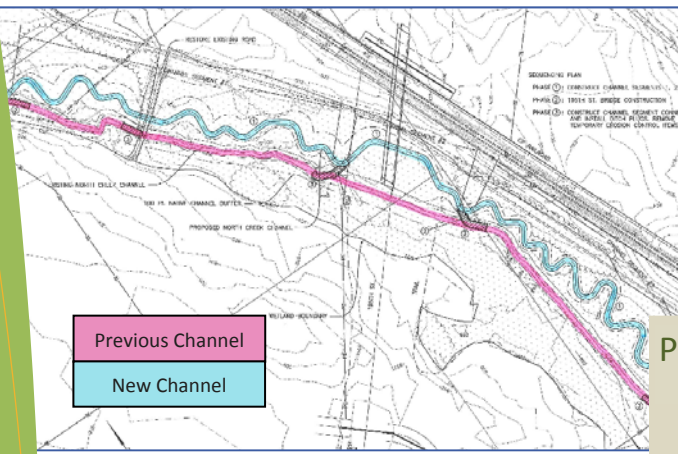
The City of Farmington approached the Vermillion River Watershed Joint Powers Organization (VRWJPO) in 2007 to discuss recreating a winding course (remeandering) and restoring 3,200 feet of the straightened North Creek channel. Cost-share funding from the VRWJPO enabled the City of Farmington to complete this project in the fall of 2009 at the same time as the City's 195th Street improvement and extension project.



The project involved channel restoration, stream bank stabilization, and seeding and planting with native vegetation—all of which will improve stormwater conveyance, improve water quality and habitat, and prevent erosion.



Before



City of Farmington, MN within the Vermillion River Watershed.



**Vermillion River Watershed
Joint Powers Organization**
14955 Galaxie Avenue
Apple Valley, MN 55124
www.dakotacounty.us
952-891-7000

The Vermillion River is a vital natural resource that is important to public health and recreation, as well as to preserving unique wildlife habitats. It flows from New Market Township in Scott County, through residential and agricultural areas in central Dakota County, and cascades into a 100-foot ravine before it enters the Mississippi River near the Cities of Hastings and Red Wing, Minnesota. Throughout its journey, the river reflects urban and rural life within its 335-square mile watershed.

Problem:

- Straightened stream reach allows bank and channel erosion and provides poor wildlife habitat

Actions:

- Remeander and restore 3,200 feet of straightened North Creek channel
- Incorporate this project's work with the 195th Street Extension Project
- Use native plants and willow live-staking to stabilize stream banks

Benefits:

- Reduces erosion
- Improves in-stream and riparian (streambank) habitat
- Dissipates stream's energy and excess sediment transport
- Improves aesthetics
- Protects water quality
- Helps maintain stream temperature
- Provides flood control
- Allows for education, outreach, and stewardship

Costs and contributions:

- City of Farmington: \$392,493 – project cost
- Vermillion River Watershed Joint Powers Organization: \$100,000 – cost share
- Dakota County Soil and Water Conservation District: design and construction technical assistance



Project completed October 2009