



Capital Improvement Project

Castle Rock Township: Braun Wetland Restoration



1. A portion of the Braun wetland during restoration.

This wetland restoration could establish about 100 acres of wetland bank credits within the Vermillion River Watershed.

Vermillion River Watershed Joint Powers Organization

4100 220th Street, Suite 103
Farmington, MN 55024

(952) 891-7000

vrwjpo@co.dakota.mn.us
www.vermillionriverwatershed.org

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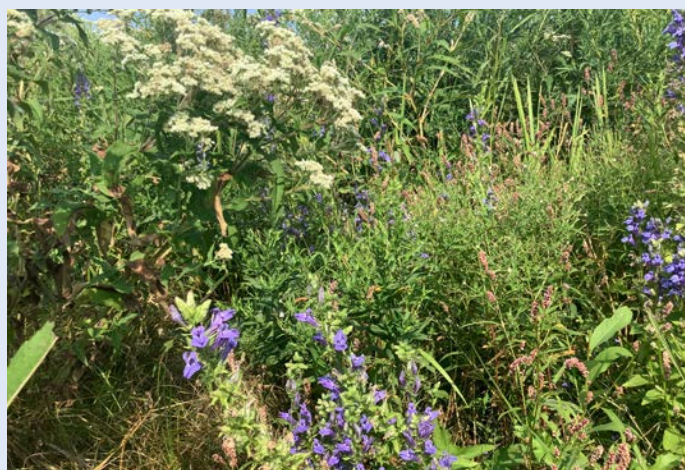


Maintaining wetland acreage with credits

More than half of Minnesota's wetlands have disappeared since the mid-1880s. Most were drained for farmland, residential and business development, and road expansions. In some cases, draining or filling a wetland is unavoidable. The Vermillion River Watershed Management Plan includes a sub-goal to "protect, enhance, and restore wetlands" under Goal A: **Protect or restore water quality in lakes, streams, and wetlands.**

One way to lessen the impact of wetland loss is by restoring a wetland elsewhere to offset the loss, creating a wetland bank. The Braun wetland restoration provides wetland bank credits that can be applied toward a future project in the watershed where wetland acreage is lost. This approach ensures wetland replacement occurs within the watershed.

The Braun wetland restoration project includes 117 acres of shallow marsh, wet meadow, and shrub type wetlands. The wetland was restored by severing over 17 miles of subsurface drain tile, removing a lift station that pumped groundwater from the drain tile to a tributary stream, plugging surface water ditches and reseeding with native wetland species. These changes will restore the hydrology of the wetland that has been drained since the 1970s and sustain native wetland plant communities long-term. The restoration also results in improved water quality in the Vermillion River by reducing and slowing stormwater runoff flow and treating nitrate.



2. Native flowering lobelia, swamp smart grass and boneset established in Braun restored wetland.



3. Native boneset plants established in Braun restored wetland.

Problem:

- A previous wetland bank in the Vermillion River Watershed had run out of credits, so wetland impacts were buying credits from banks outside the watershed.

Actions:

- Controlled burn removed site’s original vegetation
- Removed existing drainage system
- Constructed a berm and outlet
- Seeded with native wetland plant species

Benefits:

- Restores hydrology of the wetland
- Sustains native wetland plant communities
- Provides local wetland bank credits ensuring no net loss of wetlands occurs within the Vermillion River Watershed
- Reduces and slows stormwater runoff flow reaching downstream sections of the South Branch Vermillion River and the Vermillion River
- Treats nitrate-contaminated water in an area where it is a concern

Costs and contributions:

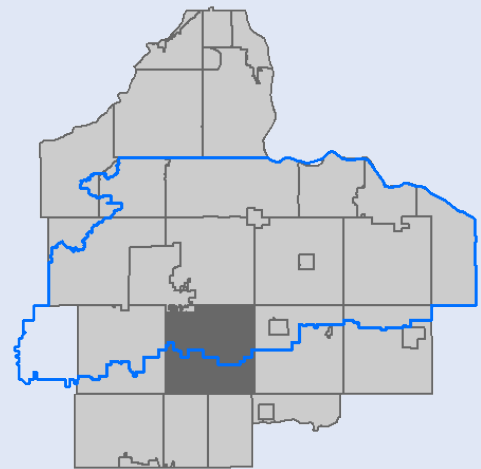
- \$500,000 from VRWJPO Capital Improvement Project budget
- TBD amount from Dakota County Environmental Resources Capital Improvement Project budget
- TBD funding, engineering, project construction oversight, hydrology assessments, and administration by the Board of Water and Soil Resources
- Vegetation assessments by Dakota County Soil & Water Conservation District

What is wetland banking?

A wetland bank creates credits to offset or lessen wetland impacts from development, road projects, and other land uses by restoring another wetland with native plantings and reconstructed hydrology.

Credits are earned over the first five years, with some awarded at the end of construction and others released upon reviews of the hydrology and vegetation. The income from the credits is put into a fund for future wetland restorations.

Location:



Castle Rock Township, Minnesota

Near Braun Turf Farm off Dakota County Rd 79
Blue outline shows Vermillion River Watershed boundary

A project completed cooperatively by:

- Vermillion River Watershed Joint Powers Organization
- Dakota County Environmental Resources Department
- Braun Family
- Dakota County Soil & Water Conservation District
- Minnesota Board of Water and Soil Resources