

## **ASWM WATERSHED PROJECT INVENTORY DATA SHEET**

### **Name and location of watershed:**

Vermillion River Watershed, located in Minnesota

**Size of watershed (in acres):** 214,400 acres

### **Title of Project/Initiative:**

Vermillion River Watershed Joint Powers Organization

### **Setting: (please check all that apply)**

- Urban (towns, cities, and suburbs with 2,500 inhabitants or more)
- Rural (anything outside the urban area)
- Inland
- Coastal

### **Need/Challenge Addressed (200 word limit):**

Surface water quality is threatened or impaired in the watershed. Water quality improvement competes with other public, private, and individual priorities. There is a perception that costs of improving water quality are not allocated fairly. Groundwater quality is at risk, with known contamination above health risk limits for nitrate in some areas. Increasing consumption of groundwater threatens the future water supply. Changing precipitation patterns, decreased rainwater infiltration, and increased stormwater runoff have contributed to more intense fluctuations in river flow rate and volume. Public awareness and specific knowledge on the impacts of daily activities and appropriate stewardship is lacking. Several federal, state, and local agencies manage specific aspects of water protection, and limited coordination and communication among these agencies can create inefficiencies and cause confusion. Minnesota's climate is getting warmer and wetter, which poses a threat to water quality, wildlife, and infrastructure. The Vermillion River Watershed JPO is a "young" organization in a dynamically changing landscape and has not always been able to fill gaps and address new opportunities. 10. Sensitive biological resources -- plants, fish, insects, and wildlife -- in the Vermillion River are not as healthy as those in reference rivers

### **Goals & Objectives (please include ecosystem services/values focused on):**

1. Protect or restore water quality in lakes, streams, and wetlands.
2. Protect and restore groundwater quality.
3. Maintain a sustainable water supply.
4. Address more intense fluctuations (up and down) in river flow rate and volume.
5. Improve public awareness and stewardship of water resources.
6. Improve watershed resilience to changing precipitation and temperature patterns.
7. Protect or restore sensitive biological resources, such as plants, fish, insects, and wildlife.



## **Overall Strategy (i.e., what role do wetlands play in your project?)**

Protect or restore water quality in lakes, streams, and wetlands

1. Restore impaired waters and protect those currently not impaired
2. Reduce non-point source pollution, erosion and sedimentation
3. Protect and improve the River corridor
4. Protect, enhance, and restore wetlands
5. Protect and enhance recreational lakes

## **Techniques Used (please check all that apply):**

- Restoration (the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to former or degraded wetland.)
- Creation (the manipulation of the physical, chemical, or biological characteristics present to develop a wetland that did not previously exist on an upland or deep-water site, resulting in a gain in wetland acres.)
- Enhancement (the manipulation of the physical, chemical, or biological characteristics of a wetland (undisturbed or degraded) site to heighten, intensify, or improve specific function(s) or for a purpose such as water quality improvement, flood water retention or wildlife habitat.)
- Protection (the removal of a threat to, or preventing decline of, wetland conditions by an action in or near a wetland. Includes purchase of land or easement, repairing water control structures or fences, or structural protection such as repairing a barrier island.)

## **Team Members:**

- Team leaders (organizations, agencies or individuals that are responsible for overall project **direction, outcomes and financing**): Vermillion River Watershed Joint Powers Board (consisting of two Dakota County Commissioners and one Scott County Commissioner), Minnesota Board of Water and Soil Resources (State agency with statutory oversight responsibilities).
- **Partners (organizations, agencies or individuals that are responsible for implementation of the project by agreement or contract)**: 20 cities and townships within the watershed Apple Valley, Burnsville, Castle Rock Township, Coates, Douglas Township, Elko New Market, Empire Township, Eureka Township, Farmington, Hampton, Hampton Township, Hastings, Lakeville, Marshan Township, New Market Township, Nininger Township, Ravenna Township, Rosemount, Vermillion, and Vermillion Township; Dakota and Scott SWCDs.
- **Collaborators (organizations, agencies or individuals that are involved in an advisory role)**: Watershed Planning Commission (made up of 9 citizen advisors); Technical Advisory Group (a group of stakeholders and interested parties that are called upon to provide input to the VRWJPO on projects, programs, and policy with a focus on technical

aspects – no formal membership, city staff, engineers, consultants, planners, state agency personnel, academics, non-profit environmental groups).

**Stakeholders (organizations, agencies or individuals that are in some way impacted by the project):**

Environmental groups and their membership; recreational and outdoor organizations and their membership; farmers; landowners and land-managers; state, county, and local municipal park, transportation, facility, or other land managers; lake associations.

**Overview/history (200 word limit):**

**How many individual projects are currently being implemented or are planned to be implemented within this broader watershed initiative? Please describe.**

Approximately 60 projects, between 8 highest priority subwatersheds

**Is there a track record of past, completed projects in this watershed? If yes, please describe and provide available information regarding performance/effectiveness.**

Information about past projects and performance can be found in the following reports:

- [Vermillion River Watershed TMDL Report](#)
- [Vermillion River Monitoring Network 2017 Annual Report](#)
- [Vermillion River Watershed Joint Powers Organization Annual Activity Reports and Financial Statements](#)

**Start and end dates (dates can overlap – estimates are acceptable):**

- **Planning:** 2002-2005 (2013-20016)
- **Implementation:** 2016-2025
- **Monitoring:** Ongoing (2016-2015)

**Cost – Financing (estimates are acceptable):**

- **Planning:** \$188,000 (2013-2016)
- **Implementation:** [Implementation Planning Table \(pages 121-122\)](#)
- **Monitoring:** approximately \$150,000 - \$200,000 annually
- **Continual (are there ongoing maintenance costs that will be required?):** No information provided.

**Resulting benefits (please list what was measured and how):**

Flood Control	Water Quality	Discharge	Hydrological Conditions	Wetland Restoration	Biodiversity/Productivity	Listed Species	Economically Important Species	Pub. Access, Rec, Awareness	Other Economic Benefits	Other
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X	X		X		X			X		pollutant removal, property values, Habitat
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Environmental benefits (e.g. water quality improvements, habitat protection or improvement, reduced phosphorus and nitrogen loads, etc.): stabilizing flow rates, replenishing groundwater, and removing pollutants through filtration and biodegradation, water quality improvement and watershed resilience

**Financial or Economic Impact Benefits (e.g., avoided damage costs, increase in commercial fish revenue, increase in tourism revenue, etc.):** Avoided flood damages; avoided costs of erosion damages (soil loss, soil quality, ravine and stream stabilization costs, equipment impacts from gullies, etc) and sedimentation impacts (ditch and culvert clean-outs, impacts to properties; increased property values; improved recreational values (fisheries, hunting, bird-watching, canoeing, etc.); reduced infrastructure costs (along with reduced maintenance).

**Non-Market Economic Benefits (may be monetized - e.g., increased value of recreation or aesthetics or other improvements using dollar values; or non-monetized descriptions of benefits – e.g., number of people who may benefit from improved recreation or aesthetics or other resulting improvements):** No information provided.

**Other:** Benefits to ecological stability and resilience.

**Are benefits based on actual measures or did you use a model to predict benefits?**  
Listed benefits above are generalized and conceptual.

**Is there a cost-benefit analysis available? Yes or No (If yes, include a copy with your response)**

No, there currently isn't a formalized cost benefit analysis for this "project". The VRWJPO is a watershed management organization meeting the requirements established by the 1982 Metropolitan Surface Water Management Act covering the Seven County Metropolitan Area of Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, and Washington Counties in Minnesota.

**If you do not have any data currently available in regard to benefits, how do you plan to measure them?** The VRWJPO is using published calculators for estimating pollutant reductions for projects funded through the activity of the VRWJPO. These measures may be used over time to estimate benefits derived for the costs incurred. It should be noted that variables such as land values play an important role in overall costs and thus the same practice deriving similar benefits may have differing costs in differing locations and thus skew

a straightforward measure of benefits to costs. Monitoring results may also provide indirect measures for benefits over time.

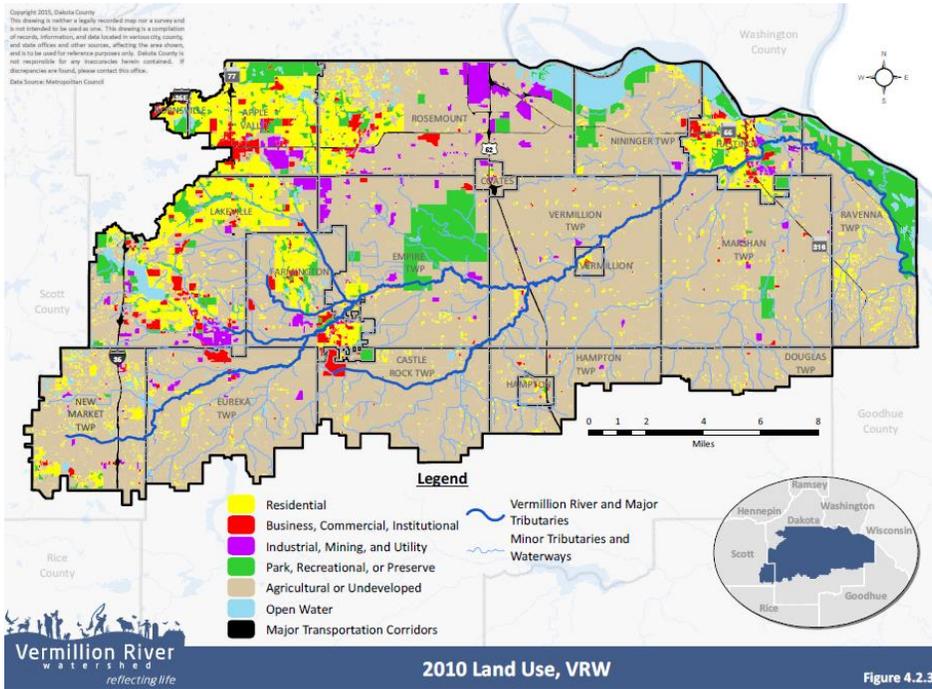
**Where there any innovative designs/technologies/policy changes created to enable the project or that resulted from the project? (If so, please describe):**

There are individual innovative designs, technologies, and policies that have been part of the overall efforts of implementation of the Vermillion River Watershed Management Plan over time. These are included in the Annual Activity Reports of the VRWJPO. Additional innovations are described in the following documents:

- [A Joint Powers Agreement between Dakota and Scott Counties](#)
- [Metropolitan Surface Water Management Act](#)
- [Metropolitan Area Local Water Management Rules](#)

**Lessons Learned:** The current VRWJPO is a second instance of a Joint Powers. The first instance was a Joint Powers Organization made up of all of the local municipalities within the watershed (21 cities, towns, and townships at that time). The decision-making structure of the organization was cumbersome with the 21 members, leading to internal conflicts and disagreements among member groups. This eventually led to increasing difficulties in implementing programs and projects and eventual dissolution under direction of the Minnesota Board of Water and Soil Resources (the State oversight body). By statute, the responsibilities of watershed management under the Metropolitan Surface Water Management Act would revert to the County level of government. The two Counties involved decided to move forward in a new partnership forming a new instance of a Joint Powers between the two Counties. The new structure of a three member board proved more manageable in terms of decision-making, support, and oversight. In development of the new structure the Counties also authorized a special taxing district to provide direct means for financial support for the organization.





**FMI (please include contact name, organization, website, phone number and/or email address):**

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