Agenda: Vermillion River Watershed Joint Powers Board (VRWJPB) Meeting

Date and time:

July 23, 2026, 1 p.m., in-person at the Dakota County Extension and Conservation Center and virtually via Microsoft Teams

Some VRWJPB members may be participating in this meeting via interactive technology, in compliance with Minn. Stat. 13D.04.

1.	Call to Order		
2.	Roll Call		
3.	Audience Comments on Items Not on the Agenda *(please limit audience comments to five minutes)*		
4.	Approval of Agenda	Action	Page 1
5.	Approval of Minutes from the June 25, 2026, Meeting	Action	Page 3
6.	Consent Agenda	Action	Page 8
	a. Acceptance of Treasurer's Reports		
	b. Authorization to Schedule a Public Hearing to Receive Comments on the Preliminary Vermillion River Watershed Joint Powers Organization 2027 Budget and Watershed Management Tax District Levy		
7.	Approval of Expenses	Action	Page 13
8.	Business Items		
	a. Presentation of Summarized Results from the 2025 Vermillion River Monitoring Network Report	Information	Page 14
	b. Presentation and Discussion on the Vermillion River Watershed Joint Powers Organization Preliminary 2027 Budget and Watershed Management Tax District Levy	Information	Page 33
9.	Staff Reports		
10.	Adjourn	Action	

Please note, the July 23, 2026, Vermillion River Watershed Joint Powers Board meeting will take place **in-person** in Conference Room A at the Dakota County Extension and Conservation Center, located at 4100 220th Street West, Farmington, MN; and **online** via the Microsoft Teams link below:

Join: https://teams.microsoft.com/meet/240394213453739?p=z1N1AtpUEGFHhsIm4Q
Meeting ID: 240 394 213 453 739
Passcode: qT37gp3D
Need help? | System reference
Dial in by phone: +1 651-273-3070,,883773086# United States, Hastings
Find a local number
Phone conference ID: 883 773 086#

Other Information

Next meeting date: August 27, 2026, at 1 p.m. *You will be notified if the meeting is cancelled due to an anticipated lack of quorum.*

Meeting Minutes: Vermillion River Watershed Joint Powers Board (JPB)

Date: Thursday, June 25, 2026, 1 p.m., in-person at the Dakota County Extension and Conservation Center, Farmington, MN, and virtual via Microsoft Teams

JPB Members in Attendance

- Dakota County Commissioner Mike Slavik
- Dakota County Commissioner Mary Hamann-Roland
- Scott County Commissioner Tom Wolf

Vermillion River Watershed Community Advisory Committee (CAC) Members in Attendance

- Sandy Weber

Vermillion River Watershed Joint Powers Organization (VRWJPO) Staff in Attendance

- Travis Thiel, VRWJPO Administrator, Dakota County
- Jeff Dunn, VRWJPO Water Resources Engineer, Dakota County
- Brita Moore-Kutz, VRWJPO Communications and Outreach Specialist, Dakota County
- Kelly Perrine, VRWJPO Senior Watershed Specialist, Dakota County

Others in Attendance

- Nikki Stewart, Environmental Resources Department Director, Dakota County (virtual)
- Brian Wisdorf, Assistant County Attorney and VRWJPO Legal Counsel, Dakota County (virtual)
- Joe Barten, Program Supervisor, Dakota County Soil and Water Conservation District (SWCD)
- Bruce Johnson, Board Member, Dakota County SWCD

Agenda

1. Call to Order

The meeting was called to order by Chair Slavik at 1 p.m.

2. Roll Call

Commissioners Slavik, Hamann-Roland, and Wolf were present in-person.

3. Audience Comments on Items Not on the Agenda

None.

DRAFT

4. Approval of Agenda

Res. No. VRW 26-22: Motion by Commissioner Hamann-Roland to approve the agenda, seconded by Commissioner Wolf. Motion carried on a 3-0 voice vote.

5. Approval of Minutes from the April 23, 2026, Meeting

Res. No. VRW 26-23: Motion by Commissioner Wolf to approve the minutes, seconded by Commissioner Hamann-Roland. Motion carried on a 3-0 voice vote.

6. Approval of Consent Agenda

a. Acceptance of Treasurer's Reports
b. Authorization to Execute a Joint Powers Agreement with the City of Lakeville for East Lake Internal Phosphorus Load Management Activities

Res. No. VRW 26-24: Motion by Commissioner Hamann-Roland to approve the consent agenda, seconded by Commissioner Wolf. Motion carried on a 3-0 voice vote.

7. Approval of Expenses

Travis Thiel presented the expenses from April 1-30, 2026, totaling $75,568.40, and May 1-31, 2026, totaling $49,758.27.

Res. No. VRW 26-25: Motion by Commissioner Wolf to approve the expenses, seconded by Commissioner Hamann-Roland. Motion carried on a 3-0 roll call vote.

8. Business Items

a. Approval of the Vermillion River Watershed Joint Powers Organization Stewardship Grant Guidelines

Brita Moore-Kutz explained how the VRWJPO Stewardship Grant program (Grant) has been brought back in the 2026-2035 Watershed Management Plan and is improved from the previous iteration of the program in the 2010s. Staff recalled Commissioners' concerns regarding the Grant and used their feedback as the basis for revising the program. Brita shared a few examples of Grant-funded projects from the 2010s that were successful and modeled the kind of projects staff are looking for.

Commissioner Hamann-Roland said she thought it was a great way to leverage volunteers and partners and a good use of VRWJPO funds.

Commissioner Slavik asked how staff plan to keep the JPB apprised of what projects are being selected and how expenses are being accounted for. Travis said they'd provide updates in the mid-month email updates sent to JPB and CAC members and regular staff updates during JPB meetings.

Commissioner Slavik mentioned some issues he'd seen with the old version of the Grant and noted that the new version was cleaner and tighter. He advised staff to focus on projects that have a verifiable impact on water quality and tell the story of the good work of the VRWJPO and partners.

Res. No. VRW 26-26: Motion by Commissioner Hamann-Roland to approve the guidelines, seconded by Commissioner Wolf. Motion carried on a 3-0 voice vote.

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b. Approval of Amendments to the 2026 Vermillion River Watershed Joint Powers Organization Budget

Travis Thiel presented the amended 2026 budget, which has been revised to account for fixing error in one of the financial spreadsheets that tracks staff time, as well as the Minnesota Pollution Control Agency Climate Resiliency Grant the VRWJPO has received.

Res. No. VRW 26-27: Motion by Commissioner Hamann-Roland to approve the budget amendments, seconded by Commissioner Wolf. Motion carried on a 3-0 voice vote.

9. Staff Reports

Brita Moore-Kutz

- Staff are working to get the VRWJPO website and all public-facing materials into compliance with the Americans with Disabilities Act digital accessibility requirements, just as the Counties are. The VRWJPO, classified as a special district government under the Act, has until April 2028 to meet requirements.
- The VRWJPO website has experienced some technical issues that caused Commissioners to be unable to access the meeting materials online. Brita will follow up with the site maintenance consultant to get this rectified.

Jeff Dunn

- In March, the VRWJPO submitted an application on behalf of Dakota County Parks for a Clean Water Fund competitive grant for ravine stabilization at Spring Lake Park Reserve. The Minnesota Board of Water and Soil Resources had notified Jeff earlier in the day that the Spring Lake project was not selected for a grant award. He plans to follow up and ask about what they could do to improve the application.

Travis Thiel

- The Minnesota Plumbing Board, which is housed under the Minnesota Department of Labor and Industry (DOLI), recently announced a desire to take authority over the use of non-potable water. This would impact stormwater reuse irrigation systems because it would require plumbing compliant code on the drainage to a stormwater pond, the pumps to the irrigation system, and the system as a whole. In other words, it would require treating stormwater to the standard of drinking water, if using stormwater at all. VRWJPO and other watershed organizations raised the concern that such regulations would make these kinds of projects infeasible and remove an important method for large-scale water conservation. Travis attended a public meeting of the Plumbing Board to comment on the issue. Due to significant pushback from a variety of stakeholders, including state agencies, the Plumbing Board ultimately decided to table the issue and do more research.
    - Joe Barten added that he'd been notified that the SWCD had to get a plumbing plan review and permit from DOLI for adding an underdrain to a catch basin project, which he'd never gotten before on projects like that. It's unclear if this is connected to the proposed regulation subjecting non-potable water to plumbing code, but he was equally concerned about the sudden need for additional review.

10. Adjourn

DRAFT

Motion by Commissioner Wolf to adjourn, seconded by Commissioner Hamann-Roland. Motion carried on a 3-0 voice vote.

Next meeting date: Thursday, July 23, 2026, 1 p.m., at the Dakota County Extension and Conservation Center, Conference Room A, and via teleconference on Microsoft Teams.

DRAFT

Certification

Respectfully submitted by

Brita Moore-Kutz

Communications and Outreach Specialist, Vermillion River Watershed Joint Powers Organization

Attest

_____ _____

Scott County Commissioner Tom Wolf, VRWJPB Secretary/Treasurer Date

2025 Vermillion River Watershed Joint Powers Organization

June 2026 Treasurer's Report

Account Category	MTD Actuals	YTD Actuals	% Budget	Budget	Balance
41 – County Levies	22,465	22,758	2%	1,078,225	1,055,468
41002 – Dakota County Levy	0	0	0%	1,037,693	1,037,693
41031 – Scott County Levy	22,465	22,758	56%	40,532	17,775
43 – Investment Interest & Wetland Bank Revenue	4,948	94,821	63%	150,000	55,179
43099 - Misc Other Revenue	*0*	*50,012*	*50%*	*100,000*	*49,988*
43291 - Interest on Investments	*4,948*	*44,808*	*90%*	*50,000*	*5,192*
45 – Permit Revenue	0	0	0%	1,000	1,000
47 – Grant Revenue	0	117,461	10%	1,218,010	1,100,549
49 – Operations & CIP Fund Balance	0	0	0%	401,413	401,413
49495 - Use of Fund Balance (Operations)	*0*	*0*	-	*0*	*0*
49495 - Use of Fund Balance (CIP)	*0*	*0*	*0%*	*401,413*	*401,413*
Total Revenue	**27,413**	**235,039**	**8%**	**2,848,648**	**2,613,609**
53 – Salaries	*41,317*	*252,672*	*46%*	*545,000*	*292,328*
53001 - Dakota County Staff Time	*39,196*	*250,550*	*47%*	*530,000*	*279,450*
53039 - Scott County Staff Time	*2,122*	*2,122*	*14%*	*15,000*	*12,878*
53 – Dept/County Support	43,049	63,043	51%	123,985	60,942
53002 - Administrative & Consulting	*33,719*	*48,782*	*50%*	*97,885*	*49,103*
53004 - Legal	*9,330*	*14,261*	*55%*	*26,100*	*11,839*
54 – Travel & Training	*0*	*500*	9%	*5,440*	4,940
55 – Office Support	*242*	*1,220*	101%	*1,211*	-9
57 – Operations & Programs	600	32,499	15%	212,264	179,766
57011 - Monitoring Direct Expenses	*0*	*8,759*	9%	*101,500*	92,742
57011 - Public Outreach Direct Expenses	*600*	*6,990*	9%	*80,024*	73,034
57011 - Feasibilty Direct Expenses	*0*	*9,975*	50%	*20,000*	10,025
57011- Other Direct Expenses	*0*	*6,775*	63%	*10,740*	3,965
59 – CIP	*2,601*	*29,741*	2%	*1,960,748*	1,931,007
Total Expenses	**87,810**	**379,675**	**13%**	**2,848,648**	**2,468,973**
VERMILLION RIVER WATERSHED Surplus/Deficit	**-60,396**	**-144,636**		**0**	**-144,636**

6b. Authorization to Schedule a Public Hearing to Receive Comments on the Preliminary Vermillion River Watershed Joint Powers Organization 2027 Budget and Watershed Management Tax District Levy

Meeting Date: 7/23/2026
Item Type: Consent-Action
Contact: Brita Moore-Kutz
Telephone: (952) 891-7967

Resolution

WHEREAS, the Vermillion River Watershed Joint Powers Board (VRWJPB) is required to adopt an annual budget for the Vermillion River Watershed Joint Powers Organization (VRWJPO) by September 1 for the following calendar year; and

WHEREAS, the VRWJPB is authorized by Minn. Stat. § 103B.211 and the Joint Powers Agreement between Dakota and Scott Counties that established the VRWJPO to adopt a budget for the VRWJPO and decide on the total amount necessary to be raised from the Watershed Management Tax District Levy to meet its budget; and

WHEREAS, the VRWJPO must hold a public hearing on the preliminary budget and levy prior to their adoption in accordance with the requirements of Minn. Stat. Sec. 103B.211, subd. 1 (a)(5) and the statutes cited therein; and

WHEREAS, notice of the hearing, along with a summary of the preliminary budget, must be published in one or more newspapers of general circulation in Dakota and Scott Counties once each week for two successive weeks before the hearing.

NOW, THEREFORE, BE IT RESOLVED, that the VRWJPB hereby schedules a public hearing for August 27, 2026, at 1 p.m. for the purpose of receiving comments on the preliminary VRWJPO 2027 budget; and

BE IT FURTHER RESOLVED, that VRWJPO staff is hereby directed to publish notice of the public hearing.

Background

VRWJPO staff has prepared a preliminary VRWJPO 2027 budget by assessing the needs of the watershed, strategic planning with the VRWJPB, and the implementation section of the 2026-2035 Vermillion River Watershed Management Plan. Any proposed contributions from Dakota County or Scott County which the VRWJPB deems appropriate from the annual property tax levy must be recommended to the Dakota County and Scott County Boards prior to the date by which they shall establish their maximum levy pursuant to Minn. Stat. § 275.065, subd. 1.

Recommendation

Staff recommends that the VRWJPB schedule a public hearing on August 27, 2026, at 1 p.m. to receive comments on the preliminary VRWJPO 2027 budget.

Financial and Staffing Impacts

There is no fiscal impact from this action. At its August 27, 2026, meeting, the VRWJPB will need to approve a preliminary VRWJPO 2027 budget and recommend an appropriate Watershed Management Tax District Levy to Dakota and Scott counties.

Previous Board Actions

None.

Attachments

Attachment: Draft Dakota County Public Notice for Hearing on Preliminary VRWJPO 2027 Budget
Attachment: Draft Scott County Public Notice for Hearing on Preliminary VRWJPO 2027 Budget

PUBLIC NOTICE of SCOTT COUNTY

Vermillion River Watershed Joint Powers Organization Public Hearing on the Preliminary VRWJPO 2027 Budget and Watershed Management Tax District Levy

Notice is hereby given that the Vermillion River Watershed Joint Powers Organization (VRWJPO) will hold a public hearing at 1:00 p.m. on Thursday, August 27, 2026. The purpose of this hearing is to receive comments on the preliminary VRWJPO 2027 Budget and Watershed Management Tax District levy. It will take place at the Dakota County Extension and Conservation Center Conference Room A, 4100 220th Street West, Farmington, MN 55024. Instructions to access the hearing online are at https://www.vermillionriverwatershed.org/about-us/joint-powers-board. Advance notice of intent to attend in person is appreciated, but not required, to Travis Thiel at travis.thiel@co.dakota.mn.us or (952) 891-7546.

Agencies, groups, and individuals attending the public hearing either in person or online will have the opportunity to provide written or oral comments. Prior to the public hearing, written comments may be addressed to the VRWJPO, 4100 220th Street West, Suite 103, Farmington, MN 55024, or emailed to Travis Thiel.

The preliminary VRWJPO 2027 Budget and Watershed Management Tax District levy can be viewed online at https://www.vermillionriverwatershed.org/about-us/joint-powers-board. Paper copies of the preliminary VRWJPO 2027 Budget and Watershed Management Tax District levy, as well as requests for accommodations at the public hearing, can be obtained by contacting Brita Moore-Kutz at brita.moore-kutz@co.dakota.mn.us or 952-891-7967.

PUBLIC NOTICE of DAKOTA COUNTY

Vermillion River Watershed Joint Powers Organization Public Hearing on the Preliminary VRWJPO 2027 Budget and Watershed Management Tax District Levy

Notice is hereby given that the Vermillion River Watershed Joint Powers Organization (VRWJPO) will hold a public hearing at 1:00 p.m. on Thursday, August 27, 2026. The purpose of this hearing is to receive comments on the preliminary VRWJPO 2027 Budget and Watershed Management Tax District levy. It will take place at the Dakota County Extension and Conservation Center Conference Room A, 4100 220th Street West, Farmington, MN 55024. Instructions to access the hearing online are at https://www.vermillionriverwatershed.org/about-us/joint-powers-board. Advance notice of intent to attend in person is appreciated, but not required, to Travis Thiel at travis.thiel@co.dakota.mn.us or (952) 891-7546.

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Vermillion River Watershed Joint Powers Organization
4100 220th St. W., Suite 103, Farmington, MN 55024

June 2026 Expense Report

The invoices submitted between May 1 and May 31, 2026
total: $49,758.27

The final invoices submitted between June 1 and June 30, 2026 total:

Invoice	Vendor		Amount
	DC Staff Time	$	39,195.73
April	DC Legal	$	1,957.85
May	DC Legal	$	7,372.16
CI-000001143	Scott County	$	772.91
CI-000001144	Scott County	$	300.95
CI-000001145	Scott County	$	424.20
CI-000001146	Scott County	$	623.65
2026	Metro Childrens Water Festival	$	600.00
236224	MN DNR	$	4,850.00
R-030811-000 - 5	WSB	$	22,924.75
23191497.01 - 13	Barr Engineering	$	1,522.00
00222-0024-1	Emmons & Olivier	$	5,856.75
2582346	Stantec	$	1,078.91
6/3/2026	Menards	$	87.89
Pcard	Jeff Dunn AELSLAGID	$	122.50
Pcard	Canva Annual Subscription	$	119.40
		TOTAL $	**87,809.65**

Action Requested: Approval of all expenses as presented

8a. Presentation of Summarized Results from the 2025 Vermillion River Monitoring Network Report

Meeting Date: 7/23/2026
Item Type: Regular-Information
Contact: Kelly Perrine
Telephone: (952) 891-7002

Resolution
Information only; no action requested

Background
Water quality and flow data collected through the Vermillion River Monitoring Network (VRMN) provide Vermillion River Watershed Joint Powers Organization (VRWJPO) staff and stakeholders with information related to the water quality of the Vermillion River and its tributaries. These data allow staff to make informed decisions on how to prioritize resource needs, guide budget allocations for resource improvements, and can quantify resource improvements following implementation. Kelly Perrine will provide a brief presentation summarizing the results from the 2025 VRMN report. You can view or download the 2025 VRMN report and previous years reports from the VRWJPO website.

Recommendation
None

Financial and Staffing Impacts
None

Previous Board Actions
None

Attachments
Attachment: 2025 Vermillion River Monitoring Network Report



2025 Water Quality Monitoring Report

Vermillion River watershed
reflecting life

State of the Watershed

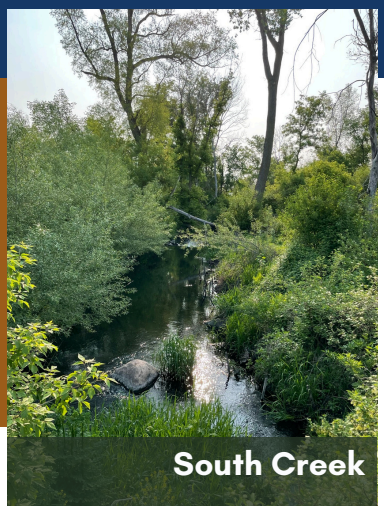
In 2025, water quality and temperature in the Vermillion River and its tributaries met many of the state and federal standards, indicating a healthy condition for the watershed. However, there is room for improvement, particularly regarding level and sources of nitrogen, low dissolved oxygen, elevated *E. coli* bacteria, temperature exceedances, and suspended solids concentrations. Continued monitoring of these issues, as well as the planning and implementation of restoration and protection efforts within the eight unique subwatersheds, will help address the various beneficial use impairments (consumption [mercury], life [aluminum, dissolved oxygen, fish, macroinvertebrates, total suspended solids], and recreation [*E. coli*]) found throughout the watershed.

Sampling Summary

- 25 monitoring events with 200 samples collected
- Conducted under Baseflow, Runoff, and Snowmelt conditions

Highlights

- Decreased total suspended solids levels in South Creek Subwatershed
- Habitat conditions along the Vermillion River and major tributaries are stable



South Creek

Climate Conditions

2025 was a year of climate extremes, characterized by above-average temperatures and persistent drought and heavy rainfall. Following warm, but dry conditions in February, multiple snow events brought heavy precipitation in the early spring. Mild temperatures melted the snow almost as fast as it fell and precipitation levels remained below normal until June. Both June and July were the rainiest months of the year (above the 30-year average) due to multiple days of storm events. After the return of more "normal" hydroclimatic conditions in August, a dry spell took hold through the rest of the year.



South Branch Vermillion River

Vermillion River Watershed

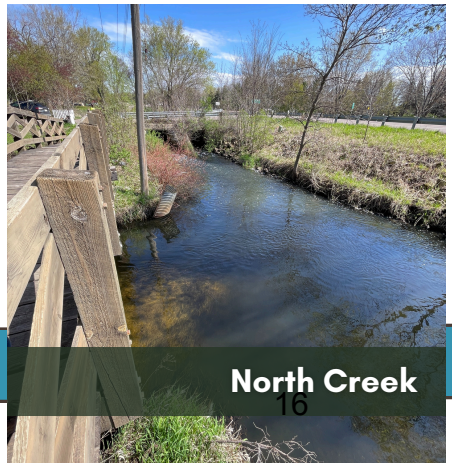
The Vermillion River Watershed (VRW) is the largest watershed in the Twin Cities seven-county metropolitan area. The watershed drains 335 square miles of rural, suburban, and urban landscapes from its headwaters in New Market Township, Scott County and across Dakota County, to its confluences with the Mississippi River at Hastings and Red Wing, Minnesota.

Cities and townships including Apple Valley, Burnsville, Castle Rock Township, Coates, Douglas Township, Elko New Market, Empire, Eureka Township, Farmington, Hampton, Hampton Township, Hastings, Lakeville, Marshan Township, New Market Township, Nininger Township, Ravenna Township, Rosemount, Vermillion, and Vermillion Township make up the watershed.

The Vermillion River main stem travels 35 miles west to east, joined by four major tributaries (North Creek, Middle Creek, South Creek, and South Branch) and many unnamed minor tributaries. The overall topography of the watershed is relatively flat, with low-relief throughout most of the watershed. The watershed's highest elevation is 1,230 feet and lowest elevation is 667 feet. The western part of the watershed has varied topographical features due to glacial moraine deposits. The central and eastern portion flattens out into a relatively level glacial outwash plain. Near the Mississippi River, bedrock bluffs provide more significant relief, but bluff lands make up a small proportion of the overall watershed area.

With its proximity to the Twin Cities Metropolitan Area and a self-sustaining brown trout population, the Vermillion River is a popular place for local anglers and nature enthusiasts. The Vermillion River Watershed protected trout streams includes 32 miles of main stem and 14.4 miles of tributaries and is one of the last trophy trout fisheries in a metropolitan area, according to Trout Unlimited.

The VRW has been, and is continuing to be, threatened by rapid urban development and rural land uses. As the human population in the watershed grows with each passing year, so do concerns for maintaining the ecological integrity of the river and its tributaries.



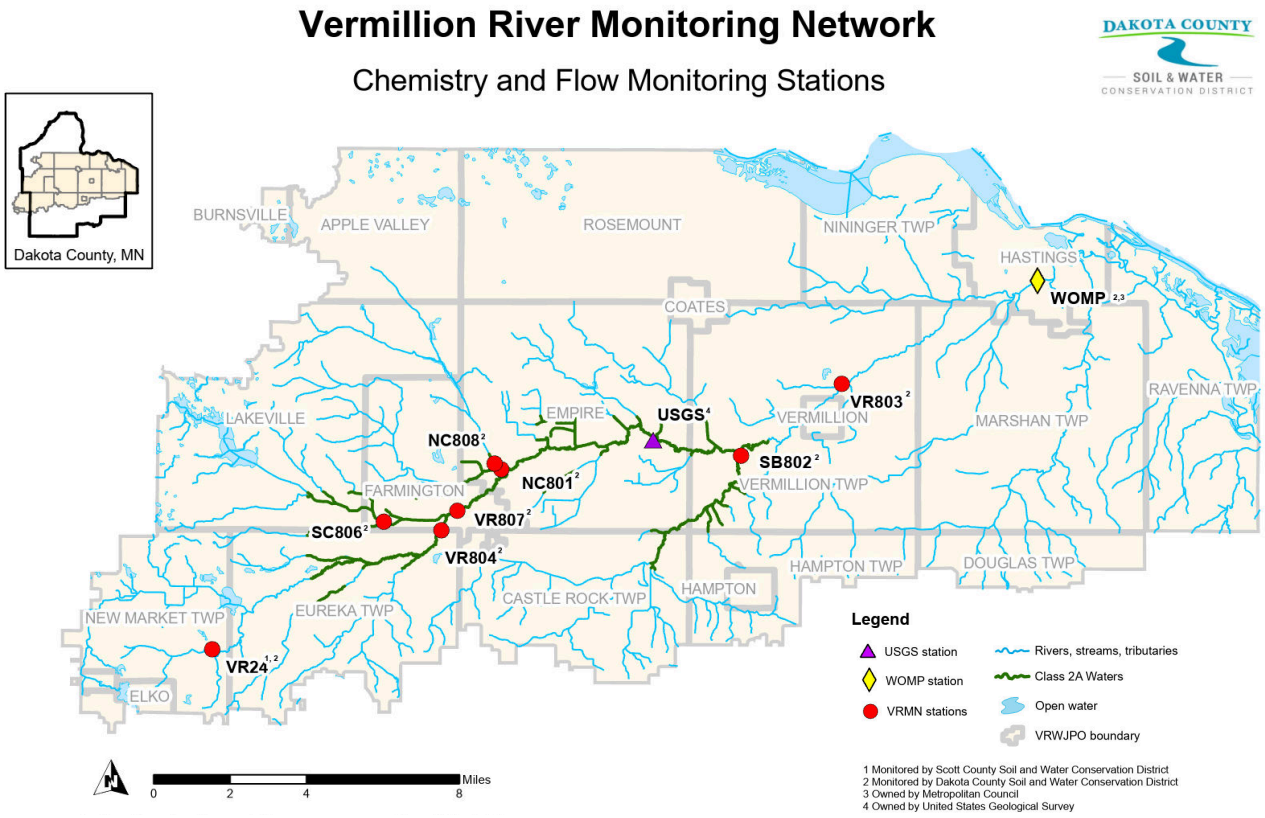
North Creek

Monitoring History and Sampling Parameters

The Vermillion River Monitoring Network (VRMN) was created in the early 2000s to obtain water quality and quantity data for the VRW on behalf of the Vermillion River Watershed Joint Powers Organization (VRWJPO). The VRMN is designed to be spatially extensive and representative of the wide range of flow regimes and land uses encountered in the VRW and its eight unique subwatersheds.

Six of these subwatersheds – Upper Mainstem Vermillion River • South Creek • Middle Mainstem Vermillion River • North Creek • South Branch Vermillion River • Lower Mainstem Vermillion River – are reported here. The two additional subwatersheds – Middle Creek and Lower Vermillion-Mississippi Direct – are not explicitly discussed due to the lack of a representative monitoring station in either subwatershed. While conditions in the Middle Creek Subwatershed are understood as part of the North Creek Subwatershed analysis, due to the Mississippi River's influence on the Lower Vermillion-Mississippi Direct Subwatershed during flood conditions, no independent water quality data have been collected in that subwatershed at this time.

The network consists of eight permanent monitoring stations representing the different subwatersheds and several biological (habitat and macroinvertebrate) monitoring stations. These strategically selected sites provide information about the status of the river and its tributaries, allowing for tracking of long-term trends and more effective management of the water quality and quantity of the VRW.



Sampling parameters include a combination of chemical, physical, and biological parameters and assessments to help identify major sources of pollutants and prioritize areas for management.

Chloride • Chlorophyll a • Dissolved Oxygen • *E. coli* bacteria • Habitat Macroinvertebrates • Nitrate • pH • Specific Conductance • Temperature • Total Phosphorus Total Suspended Solids • Transparency

Water Quality Monitoring

Water quality monitoring of several chemical and physical parameters enables local decision makers and state agencies to evaluate the VRW in order to implement appropriate management strategies to better protect and improve overall stream health.

Transparency of water is affected by both dissolved and suspended materials. The amount of solids (sediment, organic material) suspended in the water has the greatest impact, though dissolved organic material (tea colored water) can also result in low transparency. Elevated sediment levels in a waterbody can reduce the biological productivity of a system by reducing light penetration, increasing water temperature, covering bottom habitat, and diminishing visibility for mobile organisms. Monitoring changes in water transparency is a quick and efficient way to identify when pollutants are present in a given waterbody.

Dissolved Oxygen (DO) is a measure of the oxygen available to aquatic organisms (plant and animal). Reduced DO levels within a stream reach can cause aquatic animals (fish, macroinvertebrates) to leave the area, and under extreme conditions, lack of oxygen can result in death of aquatic organisms. In freshwater systems, such as lakes, rivers, and streams, DO concentrations fluctuate diurnally and will vary by season, location, and water depth. Many factors can influence DO levels in a water body including: water temperature, rate of photosynthesis, light penetration (turbidity and water depth), water turbulence or wave action, and the amount of oxygen used by respiration and decay of organic matter. The state standard for coldwater streams is 7 mg/L as a daily minimum and 5 mg/L as a daily minimum for warm water streams.

Conductivity is a measure of water's ability to transmit an electrical current due to the presence of dissolved chemicals. Chemicals like sodium chloride (salt) dissolve in water and the ions can have physiological effects on plants and animals. Conductivity is fairly constant in most bodies of water, but significant change, due to natural flooding, evaporation or anthropogenic pollution (such as urban and agricultural runoff), can be very detrimental to water quality.

pH is a measure of acidity (less than 7) or alkalinity (greater than 7). A change in pH can alter the behavior of other chemicals (ammonia and some heavy metals) in the water making them toxic . Very low pH can damage gills and membranes, and affect the reproductive success of fish and aquatic macroinvertebrates (bugs), while high pH can ultimately cause death. Human sources of pH fluctuations are usually related to pollution, including stormwater or agricultural runoff, wastewater discharge, or industrial runoff.

Temperature is an important factor to consider when assessing water quality. Water temperature is influenced by both natural (groundwater) and anthropogenic factors (stormwater runoff, eroding soils, and removal of streambank vegetation). Not only can it influence other important monitoring parameters (such as DO and pH), temperature also dictates the types of macroinvertebrates and fish that are able to survive in a given waterbody. Several trout species thrive in cooler waters and studies have shown that temperatures outside their preferred range can affect metabolic rate, as well as behavior, predator-prey responses, and duration of active/rest periods.



South Creek



Vermillion River

Phosphorus is required by all living things and occurs in the natural environment (rocks, soil). Phosphorus is generally considered to be the "limiting nutrient" in aquatic ecosystems, meaning that the availability of phosphorus controls the pace at which algae and aquatic plants grow. When too much phosphorus enters a given water body, eutrophication and harmful algal growth can occur. Excess phosphorus sources are usually associated with human activities: soil erosion, human and animal wastes, septic systems, detergents, runoff from farmland, streets (leaf litter) or lawns. The state standard for all monitoring sites within the VRW is less than or equal to 0.15 mg/L.

Nitrates are a form of nitrogen, which is found in several different forms (ammonia [NH_3], nitrates [NO_3], and nitrites [NO_2]) in terrestrial and aquatic ecosystems. Nitrates are essential plant nutrients, but in excess amounts, can cause significant water quality problems including accelerated eutrophication, which affects dissolved oxygen, temperature, and other water quality indicators. Nitrates are naturally present in low concentrations in surface and ground waters, but are harmful to humans and livestock, and cause aquatic ecosystem degradation in high concentrations. In the lower portion of the VRW, water flows directly into the underlying groundwater aquifer. Because of this, practices on the landscape can affect the amount of surface water runoff, sediment, and nutrients that are transported to the river. Sources of nitrates include wastewater treatment plants, runoff from fertilized lawns and cropland, failing on-site septic systems, runoff from animal manure storage areas, and industrial discharges that contain corrosion inhibitors. Coldwater streams are protected as potential drinking water sources and have a less than or equal to 10 mg/L standard.

Total Suspended Solids (TSS) is a measure of all the suspended particles (organic and inorganic material, bacteria, and algae) in the water and is a significant factor when monitoring water clarity. Suspended particles can come from a variety of sources including soil erosion from fields and stream banks, storm water runoff, industrial or wastewater discharges, stirred bottom sediments, decaying vegetation, and algal blooms. Excessive suspended sediment can impair water quality for both aquatic and human life, disrupt feeding behaviors, impede navigation and increase the potential for flooding. The state standard for coldwater streams is less than or equal to 10 mg/L and less than or equal to 30 mg/L for warm water streams.

Escherichia coli (*E. coli*) bacteria are measured as an indicator of the presence of disease-causing pathogens in the water. Originating in the intestines of living creatures (humans and other warm-blooded animals), the presence of *E. coli* in water is a strong indication of recent sewage or animal waste contamination. Potential sources of *E. coli* include land use practices (manure used as fertilizers), animal waste (wild or domestic), and failing septic tanks. *E. coli* contamination is found most commonly in heavily populated or farmed areas. The *E. coli* standard of less than or equal to 126 organisms/100mL as a geometric mean replaced fecal coliform as Minnesota's water quality standard for bacteria in 2008.

Upper Mainstem Vermillion River Subwatershed

2025 Activity Summary

- Water samples were collected biweekly from March through October
- Water level monitoring equipment was installed at VR24 by Dakota SWCD and at VR804 and VR807 by the Minnesota DNR
  - Continuous water level and temperature readings are collected at 15 minute intervals


VR24


VR804

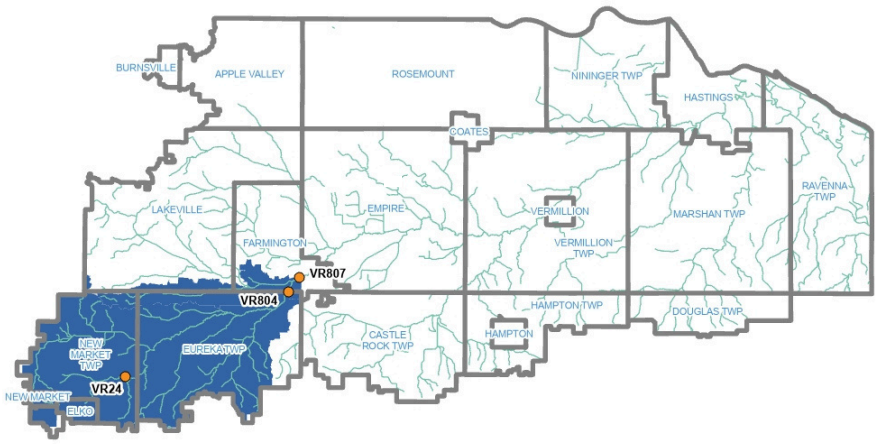

VR807

Monitoring Sites

- VR24
  - Vermillion River at Pillsbury Ave
- VR804
  - Vermillion River at 220th St
- VR807
  - Vermillion River at Spruce St

Topography and Land Use

- Gently rolling
- Predominantly agricultural with residential and commercial lots

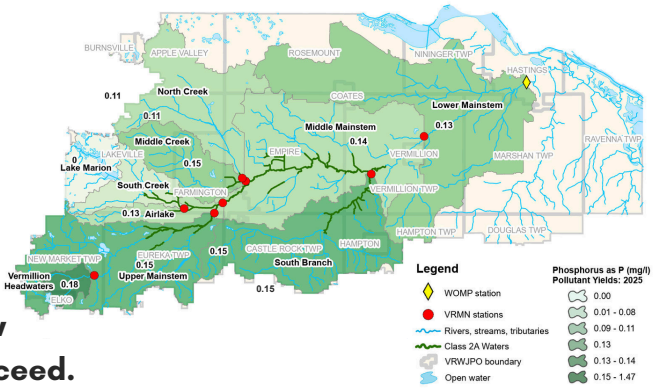


Field Data - Temperature, Dissolved Oxygen, Transparency, Conductivity, pH

Water quality data were collected during all flow conditions from March to October, 2025. **On most occasions, field parameters fell within the desired ranges**. During runoff and snowmelt sampling events, dissolved oxygen (too low at VR804 and VR807), transparency (reduced at all sites), and conductivity (exceeded at at all sites) issues were identified.

Parameter	Desired Range	VR24 Range	VR804 Range	VR807 Range
Temperature (°C)	Less than 30	-0.05 - 21.47	0.11 - 21.26	0.35 - 21.33
Dissolved Oxygen (mg/L)	Warm water - > 5.0 Coldwater - > 7.0	Warm: 7.3 - 13.03	Cold: 5.53 - 12.56	Cold: 5.39 - 12.21
Transparency (cm)	Greater than 25	11 - 100	21 - 100	16 - 100
Conductivity (µS/cm)	Less than 698	460.4 - 840	369.9 - 793	406.2 - 750

Phosphorus



Total Phosphorus (TP) includes all forms of phosphorus; particulate and dissolved. **The state standard of 0.15 mg/L was exceeded during runoff (> 1" rain in 24 hour period) and snowmelt events.** These conditions often lead to phosphorus laden sediment being carried into the river via runoff from streets and agricultural fields. **The majority of samples collected during baseflow conditions were below the standard, though occasional individual sample did exceed.**

In 2025, the Vermillion Headwaters subwatershed (located entirely in Scott County; VR24 is the outlet site), showed TP pollutant yields more in line with other sites (see map above) than in 2024 when yields were 5-6x higher than sites lower in the watershed. Climactic conditions returned to more "normal" rainfall amounts in 2025, so lower yields could be due to a lack of legacy TP flushing through the system.

Nitrates

The US Environmental Protection Agency set a nitrate (NO_3) standard of ⩽10 mg/L for drinking water to protect human health. Nitrate in streams is natural, but natural levels are generally around 0.5-2 mg/L. **In 2025, nitrate concentrations did not exceed the drinking water standard at any site.** Nitrate was highest during baseflow conditions and decreased due to rainwater diluting in-stream concentrations.

Total Suspended Solids

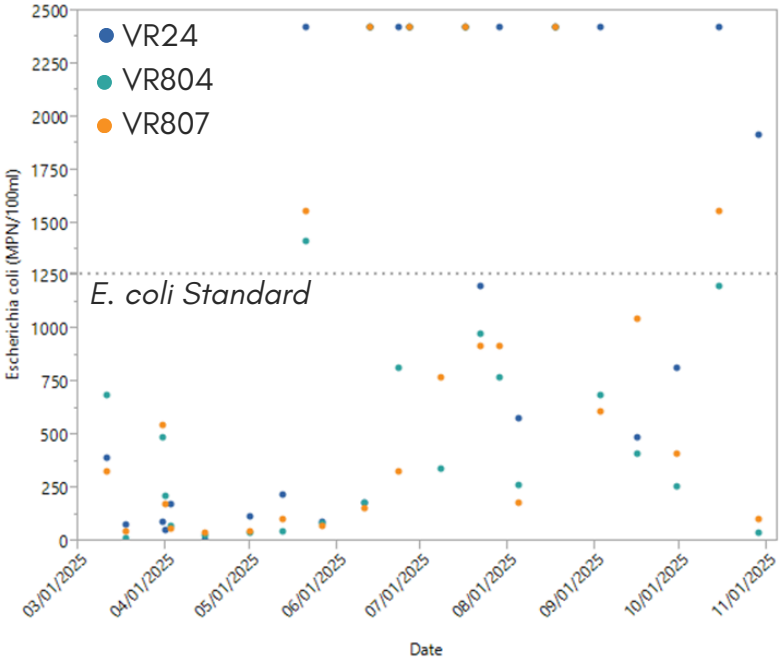
For all water samples collected in 2025, median TSS levels were below the state standard of 30 mg/L (VR24 - warm water standard) and 10 mg/L (VR804 & VR807 - coldwater standard) respectively. TSS levels fluctuated throughout the season, but were highest during runoff or snowmelt events due to increased sediment flowing into the creek.

Chlorophyll-a

Chlorophyll-a serves as an indirect indicator of nutrient levels in a river due to the relationship between water quality and algae biomass. **Chlorophyll-a levels were well below the state standard (⩽ 35 ug/L) at all sites.**

E. coli

VR24 continues to have *E. coli* levels that are considerably higher than other stations in the network, violating the single sample standard (< 1,260 MPN/100mL - see right) in over a third of samples collected in 2025. **The annual *E. coli* geometric mean (126 MPN/100mL standard) of 510.95 MPN/100 mL continues to be much higher than at other VRMN sites**. *E. coli* levels at VR804 (321.56 MPN/100mL), and VR807 (370.76 MPN/100mL) were consistent with levels seen in the lower portions of the watershed.

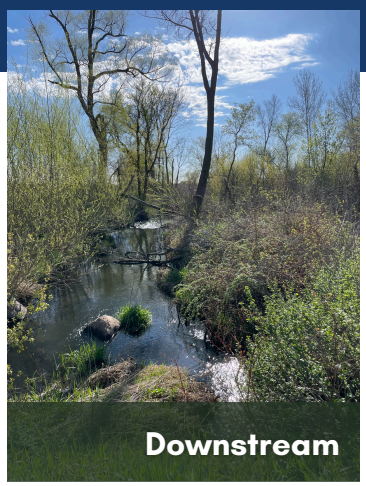


**VR24 and VR807 analysis limit at 2,420 MPN/100mL*

From 2016-2023, Scott SWCD staff assessed watercourses upstream of VR24 to determine the source of the elevated *E. coli* levels. Analyses showed sources of human DNA at all sites, with septic sources suspected as contributing to the issue. The VRWJPO continues to work with Scott County to determine a management strategy.

South Creek Subwatershed


Upstream


Downstream

2025 Activity Summary

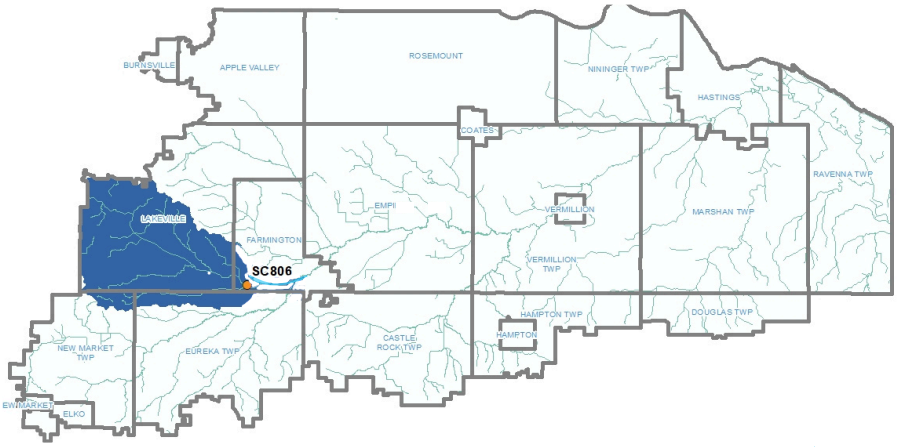
- Water samples were collected biweekly from March through October
- Water level monitoring equipment was installed by the Minnesota DNR
  - Continuous water level and temperature readings are collected at 15 minute intervals

Monitoring Site

- SC806
  - South Creek at Flagstaff Ave

Topography and Land Use

- Gently rolling
- Residential with industrial and agricultural



Field Data - Temperature, Dissolved Oxygen, Transparency, Conductivity, pH

Water quality data were collected at SC806 during all flow conditions from March to October, 2025. **On most occasions, field parameters fell within the desired ranges**. During runoff events, dissolved oxygen (too low), transparency (reduced), and conductivity (exceeds) issues were identified.

Parameter	Desired Range	SC806 Range
Temperature (°C)	Less than 30	0.38 - 22.34
Dissolved Oxygen (mg/L)	Greater than 7.0	4.87 - 11.56
Transparency (cm)	Greater than 25	20 - 100
Conductivity (µS/cm)	Less than 698	318.5 - 910
pH (S.U.)	6.5 to 9.0	7.62 - 8.05

Phosphorus

TP samples collected during baseflow conditions were below the state standard of 0.15 mg/L throughout the monitoring season. **Spring runoff conditions resulted in samples that exceeded the standard** as large runoff events send sediment and other pollutants into the creek via storm runoff from streets, parking lots, and industrial areas in this watershed.

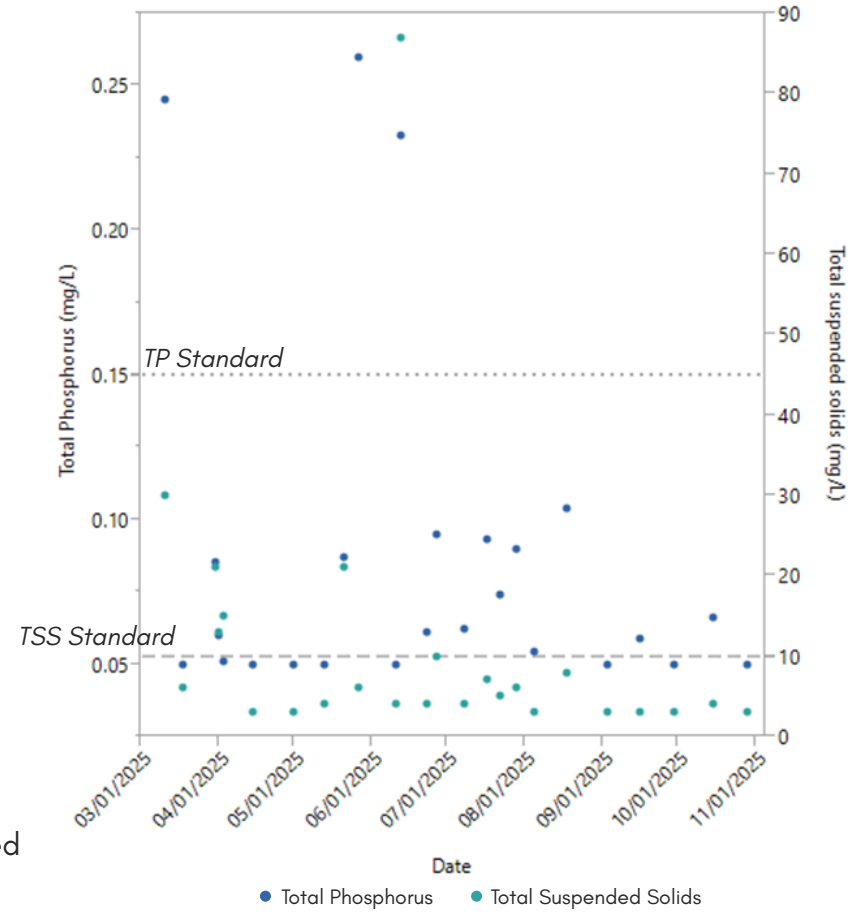
Total Suspended Solids

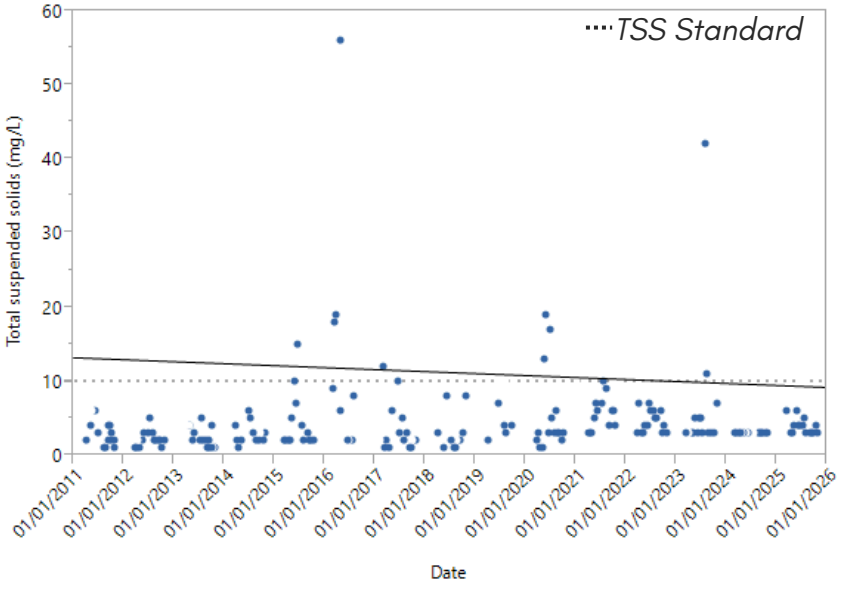
All samples collected during baseflow conditions met the TSS state coldwater standard of 10 mg/L. The highest TSS levels occurred during monitoring events that TP levels were also higher. TSS showed less variability during the midsummer and fall when the stream returned to baseflow conditions.

In recent years, the VRWJPO has implemented several projects in the South Creek Subwatershed focusing on TSS reduction: installation of hydrodynamic separator stormwater treatment devices, stream restorations, and bio infiltration. Historical monitoring results since 2016 show a reduction in TSS concentration overtime, as well as increased consistency in sample levels during baseflow conditions, suggesting efforts are meaningfully addressing pollutant reductions on the landscape.

Chlorophyll-a

Chlorophyll-a serves as an indirect indicator of nutrient levels in a river due to the relationship between water quality and algae biomass. **Chlorophyll-a levels were below the state standard (⩽ 35 ug/L), with variability under all conditions.**





E. coli

***E. coli* levels are significantly lower in the South Creek Subwatershed than in the Upper Mainstem Vermillion River Subwatershed.** Only six samples exceeded the state single sample standard (< 1,260 MPN/100mL) with the majority of samples collected in the early spring.

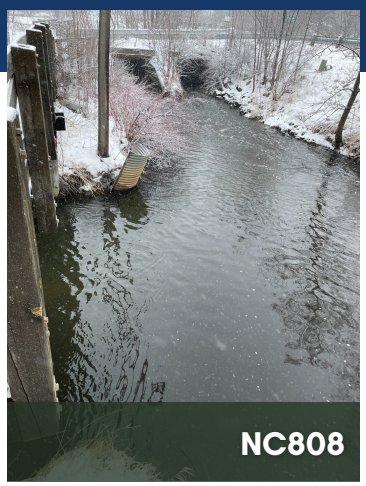
The *E. coli* geometric mean of 315.33 MPN/100 mL was nearly half of VR24, in line with VR804 and VR807 which are located nearby.

Nitrates

Nitrate concentrations were significantly below the EPA's ⩽ 10 mg/L) drinking water standard regardless of monitoring condition.

North Creek Subwatershed





2025 Activity Summary

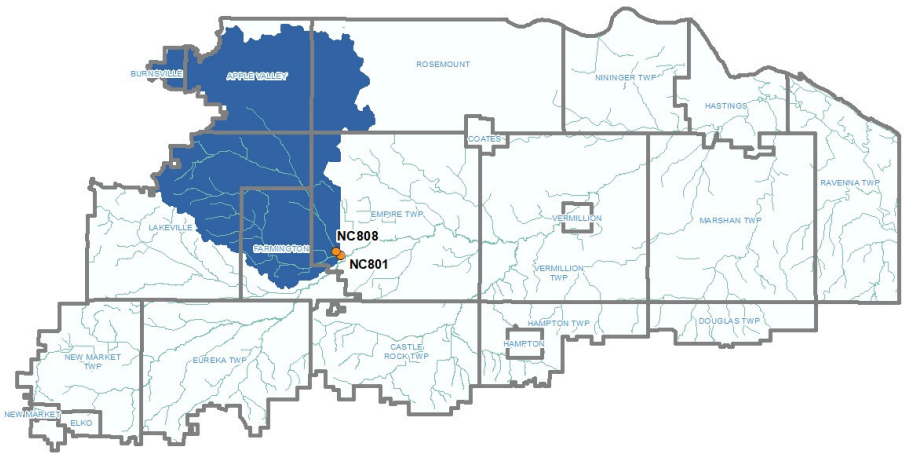
- Water samples were collected biweekly from March through October
- Water level monitoring equipment was installed by Dakota SWCD staff
  - Continuous water level and temperature readings are collected at 15 minute intervals

Monitoring Sites

- NC801
  - North Creek at Hwy 3 (DS)
- NC808
  - North Creek at Hwy 3 (US)

Topography and Land Use

- Relatively flat to gently rolling
- Residential with some agriculture, commercial, and industrial



Field Data - Temperature, Dissolved Oxygen, Transparency, Conductivity, pH

Water quality data were collected at NC801 and NC808 during all flow conditions from March to October, 2025. **On most occasions, field parameters fell within the desired ranges**. Dissolved oxygen (too low at both sites), transparency (reduced for both sites), and conductivity (exceeded at both) were issues identified during runoff and snowmelt events.

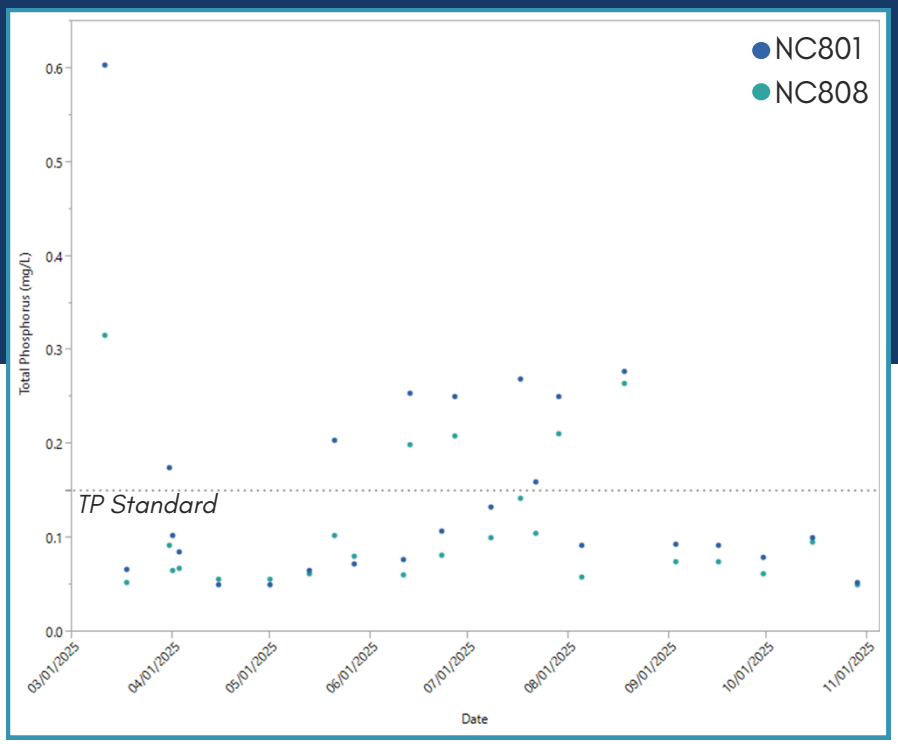
Parameter	Desired Range	NC801 Range	NC808 Range
Temperature (°C)	Less than 30	0.14 - 21.56	1.22 - 21.67
Dissolved Oxygen (mg/L)	Greater than 7.0	4.48 - 11.83	5.1 - 12.09
Transparency (cm)	Greater than 25	14 - 100	18 - 100
Conductivity (µS/cm)	Less than 698	408.3 - 795	332.5 - 821
pH (S.U.)	6.5 to 9.0	7.6 - 8.28	7.51 - 8.87

Chlorophyll-a

Chlorophyll-a serves as an indirect indicator of nutrient levels in a river due to the relationship between water quality and algae biomass. **Chlorophyll-a levels were below the standard (⩽ 35 ug/L), with variability throughout the monitoring season.**

Phosphorus

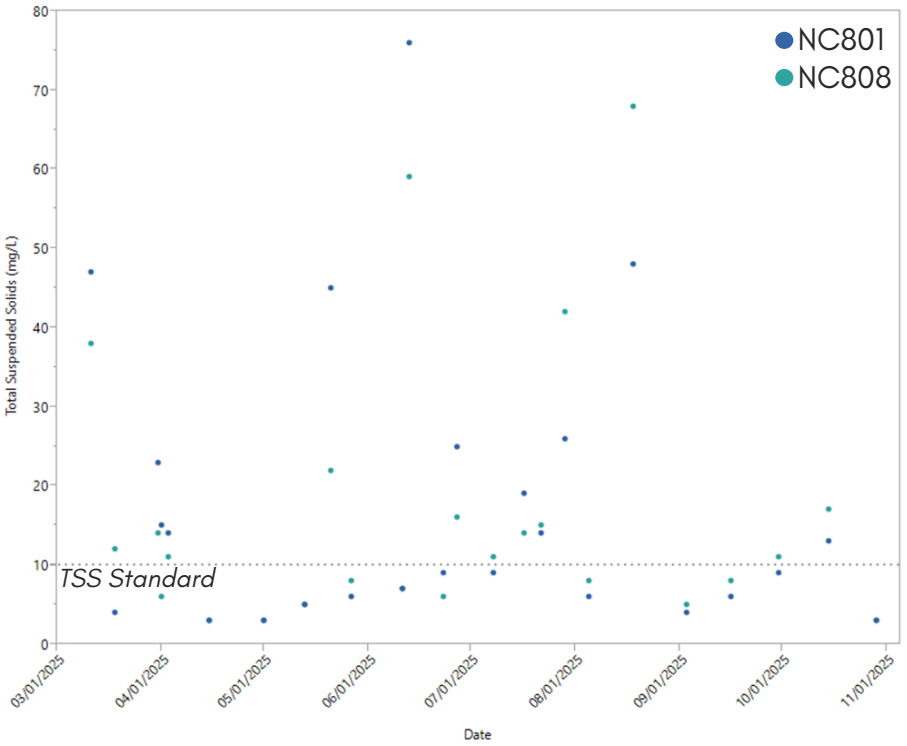
The TP state standard of 0.15 mg/L was exceeded during runoff conditions (> 1" rain in 24 hour period) in the midsummer. Samples collected during baseflow conditions in the spring and fall were below the standard at both sites. Throughout the season, TP levels at NC801 (DS site) were consistently higher than at NC808.



Total Suspended Solids

TSS levels were within the state's coldwater standard of 10 mg/L during the late spring and throughout the fall months. **TSS levels fluctuated with snowmelt and individual rain events in the early spring before being consistently above the standard from late May through early August.** The highest value in 2025 was seen at NC808 on June 13th with a reading of 76 mg/L.

Unlike with TP, TSS levels at NC808 were consistently above levels at NC801.



E. coli

***E. coli* levels in the North Creek Subwatershed were in line with levels seen elsewhere in the VRW.** Eight samples at both sites exceeded the state single sample standard (< 1,260 MPN/100mL) with the majority of samples collected in the early spring.

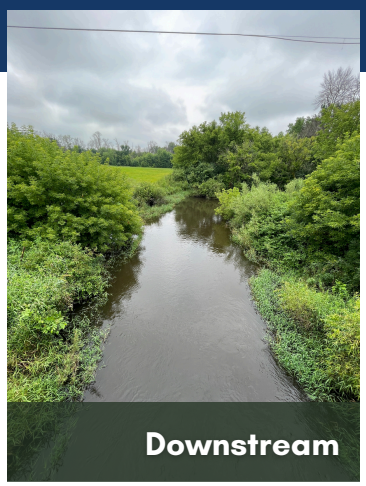
The annual geometric mean at NC801 of 404.77 MPN/100mL was the second highest while 269.04 MPN/100 mL at NC808 was average for the VRW.

Nitrates

Nitrate concentrations did not exceed the EPA's ⩽ 10 mg/L drinking water standard during the monitoring season at either site. Concentrations were in fact considerably lower than the standard, much like in other parts of the VRW. Nitrate was highest during baseflow conditions and decreased due to rainwater diluting in-stream concentrations.

South BranchVermillion River Subwatershed





2025 Activity Summary

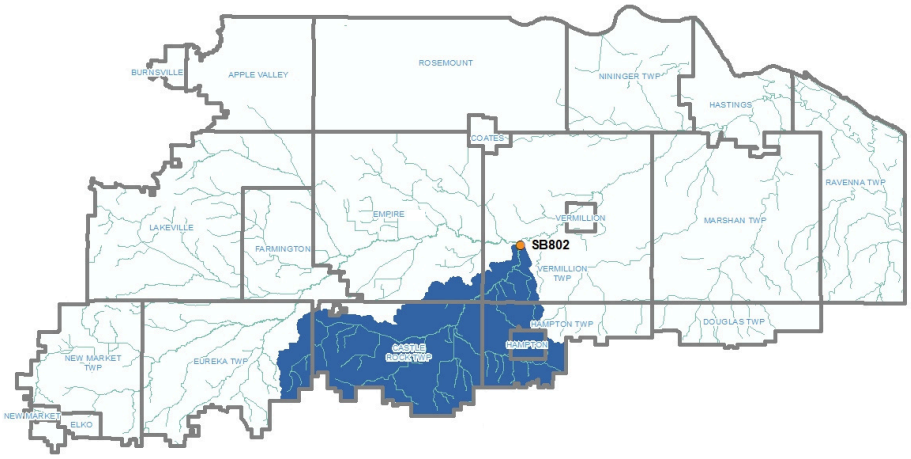
- Water samples were collected biweekly from March through October
- Water level monitoring equipment was installed by the Minnesota DNR
  - Continuous water level and temperature readings are collected at 15 minute intervals

Monitoring Sites

- SB802
  - South Branch Vermillion River at 200th St E

Topography and Land Use

- Flat with hills in southern portion
- Predominately agricultural land use



Field Data - Temperature, Dissolved Oxygen, Transparency, Conductivity, pH

Water quality data were collected at SB802 during all flow conditions from March to October, 2025. **On most occasions, field parameters fell within the desired ranges**. Dissolved oxygen (too low) and transparency (reduced) issues were identified in the watershed during runoff and snowmelt conditions.

Parameter	Desired Range	SB802 Range
Temperature (°C)	Less than 30	0.37 - 20.81
Dissolved Oxygen (mg/L)	Greater than 7.0	5.99 - 12.3
Transparency (cm)	Greater than 25	13 - 100
Conductivity (µS/cm)	Less than 698	296.5 - 601
pH (S.U.)	6.5 to 9.0	7.72 - 8.1

Phosphorus

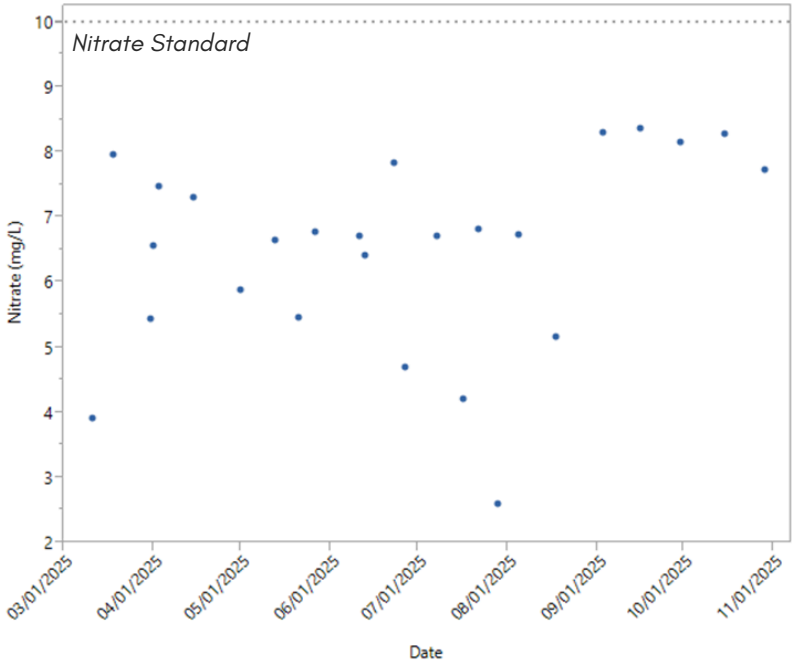
The TP state standard of 0.15 mg/L was **exceeded during runoff conditions (> 1" rain in 24 hour period) in late May/early June and late July/early August. Samples collected during baseflow conditions were below the standard.** Large runoff events often lead to sediment and other pollutants being carried into the creek via storm runoff from streets and agricultural fields.

Total Suspended Solids

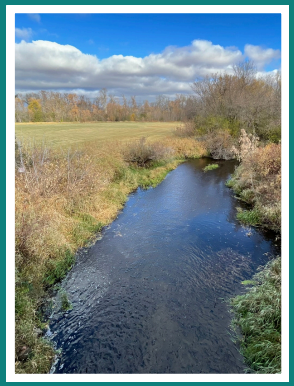
For the majority of water samples collected in 2025, **the TSS levels were within the state's coldwater standard of 10 mg/L**, although the standard may have been exceeded on days when samples were not collected. TSS levels fluctuated throughout the season, but were highest during runoff or snowmelt events in the watershed as that would have resulted in increased sediment flowing into the creek.

Nitrates

Nitrate concentrations **did not exceed the EPA's ⩽ 10 mg/L drinking water standard** during the monitoring season, **though levels are higher in this subwatershed than in others in the VRW.** Nitrate was highest during baseflow conditions and decreased due to rainwater diluting in-stream concentrations.



The **baseflow nitrate levels measured at SB802 continue to increase.** The subwatershed is predominately agricultural land use, has course-textured soils, and a high-water table. The increasing NO3 in the watershed may be the result of one of the following factors - 1) an increase in the amount of drain tile installed; 2) the turnover of marginal land not in production (or lands in conservation programs) to lands in production with concurrent nitrogen applications; 3) poor nutrient management resulting in the improper rate, source, time or placement of nitrogen fertilizers; or 4) an increase in the total acreage of agricultural land in the watershed, which in turn results in greater application of fertilizer to said land. All these factors can result in elevated NO3 levels in the soil, from which available NO3 can leach into shallow groundwater or be directly discharged to a nearby stream or ditch through drain tile.



E. coli

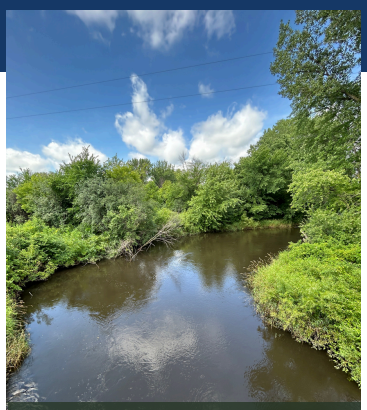
***E. coli* levels are lower in the South Branch Vermillion River Watershed than elsewhere.** Only six samples exceeded the state single sample standard (< 1,260 MPN/100mL) with the majority collected during the rainy period from June to late August. **The annual *E. coli* geometric mean of 245.24 MPN/100 mL was lowest in the whole watershed.**

Chlorophyll-a

Chlorophyll-a levels were well below the state standard (⩽ 35 ug/L), with variability throughout the monitoring season.

Middle Mainstem Vermillion River Subwatershed


Upstream


Downstream

2025 Activity Summary

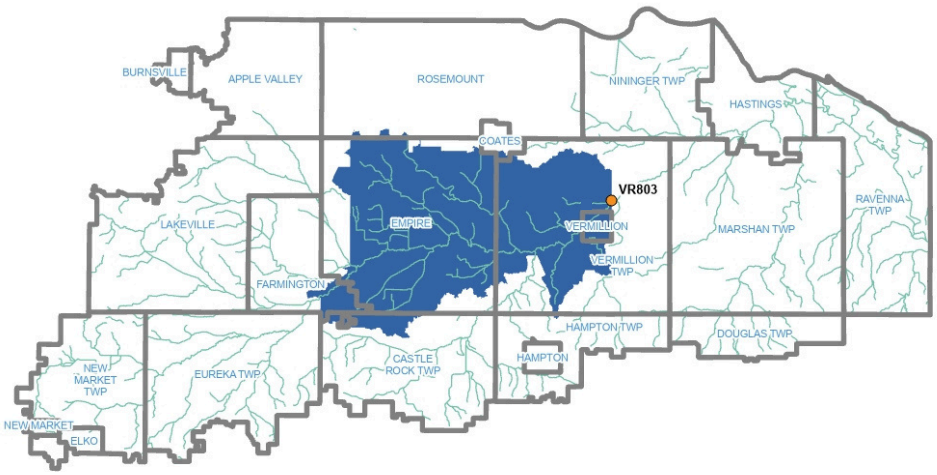
- Water samples were collected biweekly from March through October
- Water level monitoring equipment was installed by the Minnesota DNR
  - Continuous water level and temperature readings are collected at 15 minute intervals

Monitoring Sites

- VR803
  - Vermillion River at Goodwin Ave

Topography and Land Use

- Gently rolling
- Predominantly agricultural with residential and commercial lots



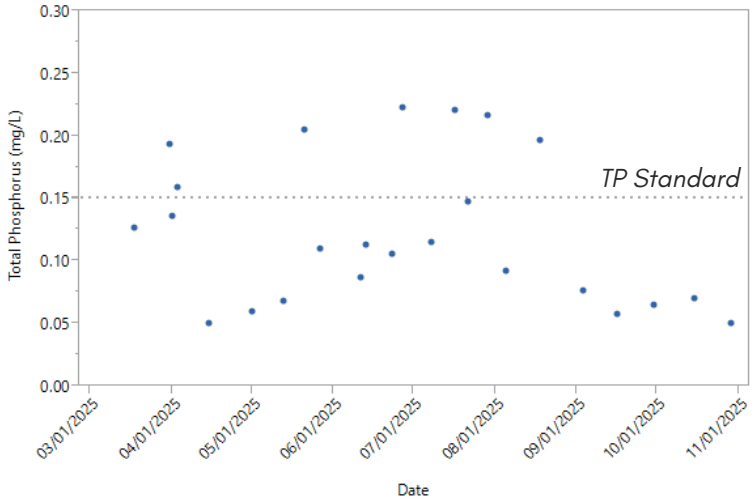
Field Data - Temperature, Dissolved Oxygen, Transparency, Conductivity, pH

Water quality data were collected during all flow conditions from March to October, 2025. **On most occasions, field parameters fell within the desired ranges**. Baseflow conditions met expectations, while during runoff events, dissolved oxygen (too low), transparency (reduced), and pH (exceeds) issues were identified.

Parameter	Desired Range	VR803 Range
Temperature (°C)	Less than 30	1.54 - 22.10
Dissolved Oxygen (mg/L)	Coldwater - Greater than 7.0	6.32 - 12.39
Transparency (cm)	Greater than 25	14 - 100
Conductivity (µS/cm)	Less than 698	383 - 680
pH (S.U.)	6.5 to 9.0	7.83 - 8.29

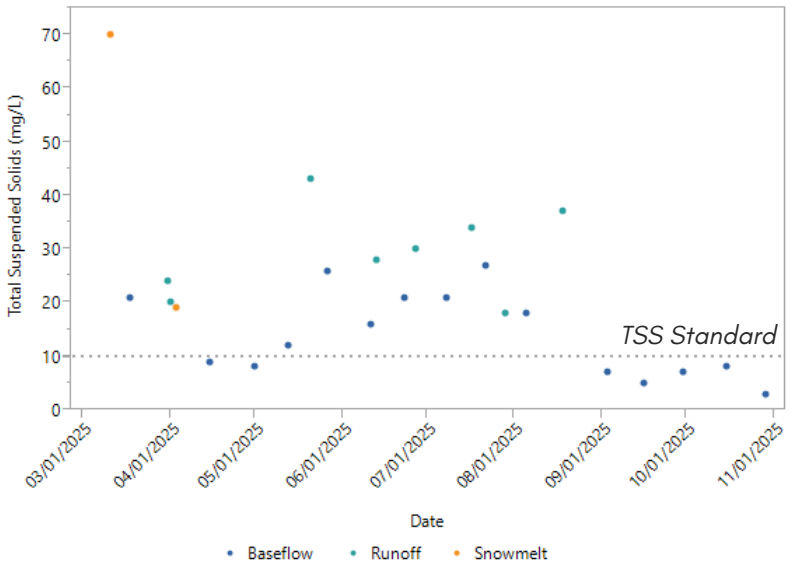
Phosphorus

The TP state standard of 0.15 mg/L was exceeded during runoff conditions (> 1" rain in 24 hour period) **in late May/early June and late July/early August. Samples collected during baseflow conditions were below the standard.** Large runoff events often lead to sediment and other pollutants being carried into the creek via storm runoff from streets, parking lots, and agricultural fields.



Total Suspended Solids

TSS levels exceeded the state's coldwater standard of 10 mg/L several times throughout the monitoring season. TSS levels were highest during runoff and snowmelt events in the watershed. During these conditions, TSS levels would be higher due to increased sediment flowing into the creek. Mid-summer sampling events also had elevated TSS levels as water levels were slowly returning to baseflow levels.



Nitrates

Nitrate **concentrations did not exceed the EPA's ⩽ 10 mg/L drinking water standard during the monitoring season at both sites.** Nitrate was highest (4.95 mg/L) during baseflow conditions and decreased to 1.17 mg/L due to rainwater dilution of in-stream nitrate concentrations.



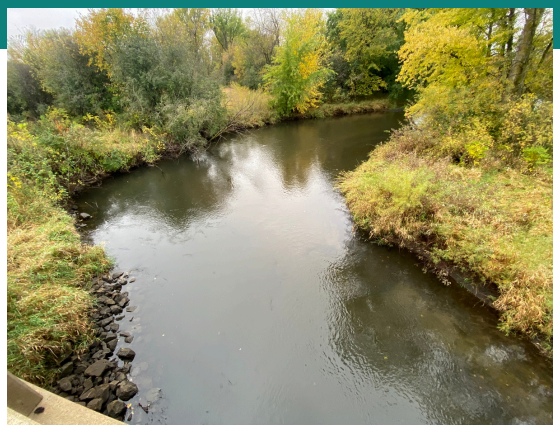
Chlorophyll-a

Chlorophyll-a levels were **below the state standard (⩽ 35 ug/L),** with increased variability towards the end of the year.

E. coli

E. coli levels are again much lower in the Middle Mainstem Vermillion River Subwatershed than what was found in the Upper Mainstem Vermillion River (specifically VR24). **Only six samples exceeded the state single sample standard (< 1,260 MPN/100mL) with five of the samples collected during the rainy period from June to late August.**

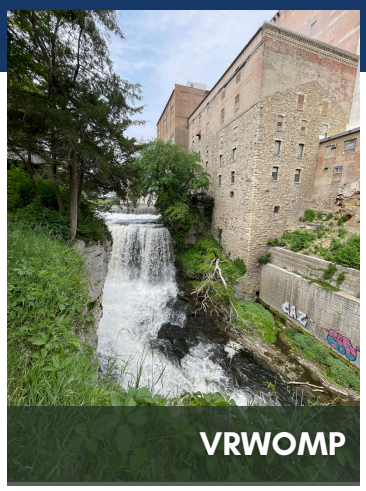
The annual *E. coli* geometric mean of 295.50 MPN/100 mL in line with other VRMN sites in the watershed.



Middle Mainstem Vermillion River

Lower Mainstem Vermillion River Subwatershed





2025 Activity Summary

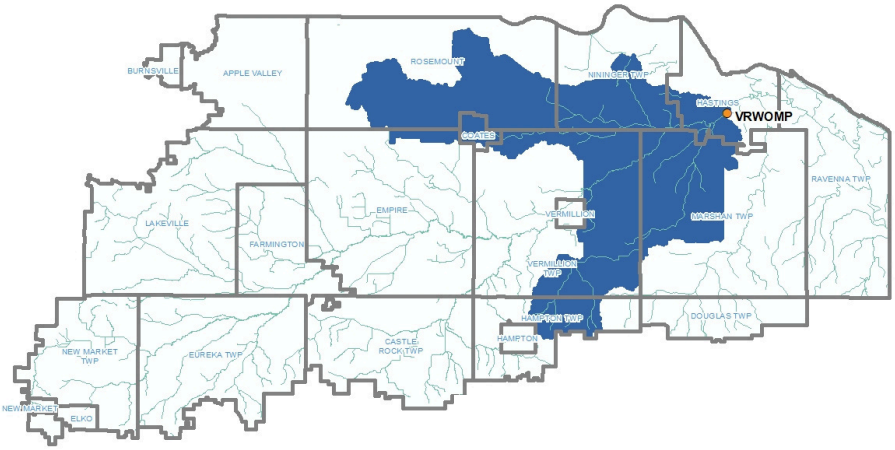
- Water samples were collected monthly from March through October
- Water level monitoring equipment was installed by Metropolitan Council
  - Continuous water level and temperature readings are collected at 15 minute intervals

Monitoring Sites

- VRWOMP
  - Vermillion River at Vermillion Falls Park (Great River Rd)

Topography and Land Use

- Steeper slopes transitioning to flat
- Predominately agricultural land use



Field Data - Temperature, Dissolved Oxygen, Transparency, Conductivity, pH

Water quality data were collected at VRWOMP during all flow conditions from March to October, 2025. **On most occasions, field parameters fell within the desired ranges**. Transparency (reduced) and conductivity (exceeded) measurements were out of range, but to a lesser extent than at other sites in the watershed.

Parameter	Desired Range	VRWOMP Range
Temperature (°C)	Less than 30	0 - 24.24
Dissolved Oxygen (mg/L)	Warm water - Greater than 5.0	7.57 - 13.3
Transparency (cm)	Greater than 25	16 - 100
Conductivity (µS/cm)	Less than 698	390.3 - 745
pH (S.U.)	6.5 to 9.0	8.03 - 8.5

Phosphorus

The TP state standard of 0.15 mg/L was exceeded during runoff conditions (> 1" rain in 24 hour period) in late May/early June and late July/early August. Samples collected during baseflow conditions in the early spring and fall were below the standard. Large runoff events often lead to sediment and other phosphorus-laden pollutants being carried into the river via storm runoff from streets, parking lots, and agricultural fields.

E. coli

***E. coli* levels seen at the VRWOMP site are in line with levels seen elsewhere higher up in the watershed.** Six samples exceeded the state single sample standard (< 1,260 MPN/100mL) with all samples collected between the middle of May and mid August. The annual *E. coli* geometric mean of 278.21 MPN/100 mL was third lowest in the watershed.

Chlorophyll-a

Chlorophyll-a levels were well below the state standard (⩽ 35 ug/L). Levels were rather consistent throughout the year, showing less variability than in previous years..

Nitrates

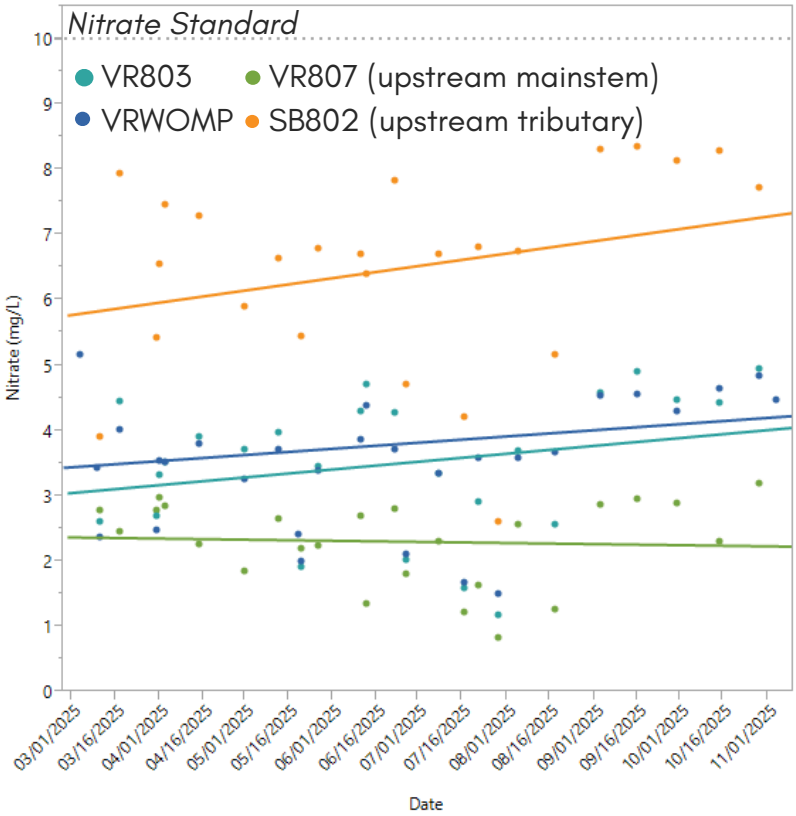
VRWOMP nitrate concentrations did not exceed the drinking water standard, though it is higher than levels in the middle watershed (VR803) and upper (VR807) watersheds due to influence from the South Branch Vermillion River (SB802). Nitrate levels were highest during baseflow conditions in the spring and fall and decreased mid-season due to rainwater causing a dilution of in-stream nitrate concentrations.

The area's soils and underlying geology allow the Vermillion River water to recharge underlying groundwater aquifers. Nitrogen leaching from agricultural production has led to groundwater contamination in private drinking water wells and the city of Hastings' drinking water supply.

Total Suspended Solids

The TSS levels were within the state's warm water standard of 30 mg/L during baseflow conditions. Exceedances were most often seen when monitoring occurred during or immediately after a rain event. Variability was high throughout much of the season before dropping in early August, and then remained low until the end of the season.

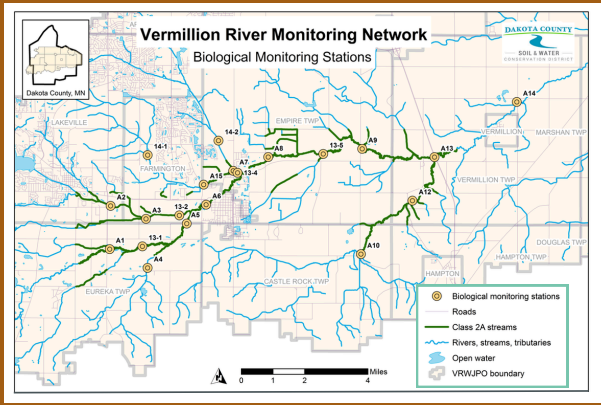




Habitat and Macroinvertebrates

Monitoring biological communities is an accepted method for assessing the health of an aquatic environment. It is believed that biological monitoring is more sensitive when identifying the cumulative effects of numerous, simultaneous stressors as opposed to chemical and physical parameters which only provide a snapshot of the abiotic factors during the monitoring season.

Habitat assessments are completed at biological monitoring stations on the main stem Vermillion River and its tributaries to better understand possible stressors to the biotic community. **Six sites were monitored in August and September 2025. Two macroinvertebrate sampling sites scored above the impairment threshhold** and **four were below the threshhold**. **Five sites were categorized as "fair"** and **one as "good" for habitat**.



Temperature

Temperature is an important factor in growth and reproduction rates of macroinvertebrates and fish, particularly brown trout.

In 2025, temperature maximums were measured above 20°C (resistance range: prolonged exposure leads to a high mortality rate) at all coldwater stream sites during the summer months. **The highest water temperatures were observed in July at most sites.** The highest temperatures observed at SB802 were observed in August.

The three sites with the lowest temperatures (SC806, VR807, and SB802) may be attributed to cool groundwater influence during low flow conditions, either naturally from springs and seeps or artificially from tile drainage. The greatest temperature-induced stress on fish likely occurs in July when temperature is highest. Annual fish surveys have identified the reach at VR804 to likely have the least desirable temperature structure for coldwater fish as few, if any, coldwater fish were caught during previous sampling surveys.

Conclusion

The VRMN is valuable as it allows staff to make informed management decisions based on the VRW's physical, chemical, and biological characteristics. Improvement is possible even in the face of observed pollutant challenges. Water quantity and flow patterns impact aquatic communities, with too much or too little causing stress. Restoring in-stream and riparian habitat, reducing nutrients and suspended materials in the stream, minimizing temperature peaks, and identifying *E. coli* sources, among other possible conservation strategies, will have a cascading positive effect on the overall health of the river and its tributaries. An effective management strategy that focuses on both the water quality and quantity aspects of the VRW.

Recommendations

- Study conductivity and DO issues in North Creek and South Creek subwatersheds
- Implement projects to address increasing NO3 levels in the South Branch Vermillion River subwatershed
- Undertake habitat improvement projects to improve fish cover, sinuosity, and channel substrate
- Network with local landowners to initiate dialogue of available restoration opportunities
- Work with partners to install strategically placed water storage and retention features in prioritized areas to minimize fluctuations in flow and temperature
- Continue monitoring to assess progress toward water quality goals

8b. Presentation and Discussion on the Vermillion River Watershed Joint Powers Organization Preliminary 2027 Budget and Watershed Management Tax District Levy

Meeting Date: 7/23/2026
Item Type: Regular-Information
Contact: Travis Thiel
Telephone: (952) 891-7546

Resolution

Information only; no action requested

Background

The VRWJPO preliminary 2027 budget is $1,991,363, including Clean Water Fund Watershed-Based Implementation Funding grant, Minnesota Pollution Control Agency Climate and Stormwater Resiliency grant, and the Watershed Management Tax District levy. The VRWJPO preliminary 2027 Budget currently identifies a Watershed Management Tax District levy of $1,132,136, consisting of $41,338 for the Scott County portion of the watershed and $1,090,798 for the Dakota County portion of the watershed. This represents an overall levy increase of five percent compared to the 2026 levy. The preliminary budget reflects recommendations from VRWJPO staff and partners for items identified in the implementation section of the 2026-2035 Vermillion River Watershed Management Plan.

Based on the proposed levy for the preliminary budget, including any use of fund balance, and wetland bank credit sales restricted fund balance, the estimated unassigned fund balance for 2027 is $873,293. Guidelines provided by Dakota County's Finance Department indicate a target unassigned fund balance between 35 and 50 percent of annual expenditures, and the resulting unassigned fund balance for the VRWJPO would be 44 percent.

An approved VRWJPO preliminary 2027 Budget will remain "draft" until the Vermillion River Watershed Joint Powers Board adopts a final 2027 Budget and both Dakota County and Scott County Boards certify the final Watershed Management Tax District levy in December of 2026.

Recommendation

None

Financial and Staffing Impacts

The identified budget and levy support staff time for the four VRWJPO staff from Dakota County, the Co-Administrator from Scott County, Dakota County legal counsel, ancillary Dakota or Scott County staff (as needed), various program and operational costs, and the identified Capital Improvement Plan projects.

For the respective levy amounts for each county shown in the VRWJPO preliminary 2027 budget, the Dakota County Property Taxation and Records Department is estimating a tax impact on the median value residential property in Dakota County of $10.39 in 2027 compared to $10.05 in 2026. The Scott County Property & Taxation Services Department is estimating a tax impact on the median value residential property in Scott County of $13.72 in 2027 compared to $13.19 in 2026. If other levy scenarios are considered, the tax impact in each respective county will change.

Previous Board Actions

None

Attachments

Attachment: VRWJPO Preliminary 2027 Budget

VRWJPO 2027 Preliminary Budget

Expense Budget Category	Expense Budget Activity	Operations and Programs Expenses	CIP Expenses	Expenses Total	2026 Expense Amount	% Change
Administration and Operations	Dakota County VRW Staff	$ 230,000	$ -	$ 230,000	$ 227,000	1%
Administration and Operations	Scott County VRW Staff	$ 15,000	$ -	$ 15,000	$ 15,000	0%
Administration and Operations	Legal Support	$ 26,000	$ -	$ 26,000	$ 25,000	4%
Administration and Operations	Miscellaneous Expenses (per diems, mileage, postage, insurance, etc.)	$ 12,000	$ -	$ 12,000	$ 11,000	9%
Administration and Operations	Training, Conferences, and Certifications	$ 6,000	$ -	$ 6,000	$ 6,000	0%
Planning	Dakota SWCD Incentive Program Policy Assistance	$ 1,500	$ -	$ 1,500	$ 1,500	0%
Planning	VRW Staff	$ 32,000	$ -	$ 32,000	$ 30,000	7%
Inventory, Assessment, & Research	Monitoring	$ 65,000	$ -	$ 65,000	$ 100,000	-35%
Inventory, Assessment, & Research	USGS and DNR Flow Gaging	$ 34,000	$ -	$ 34,000	$ 20,000	70%
Inventory, Assessment, & Research	VRW Staff	$ 38,000	$ -	$ 38,000	$ 20,000	90%
Inventory, Assessment, & Research	General GIS support (Dakota SWCD)	$ 1,000	$ -	$ 1,000	$ 1,500	-33%
Inventory, Assessment, & Research	Equipment/Supplies	$ 2,000	$ -	$ 2,000	$ 1,000	100%
Inventory, Assessment, & Research	Riparian Vegetation Assessment	$ 30,000	$ -	$ 30,000	New	New
Inventory, Assessment, & Research	Stormwater and Climate Resilience Study	$ 172,000	$ -	$ 172,000	New	New
Communications, Outreach, and Public Relations	VRW Staff	$ 120,000	$ -	$ 120,000	$ 108,000	11%
Communications, Outreach, and Public Relations	Dakota SWCD Outreach and Education	$ 40,000	$ -	$ 40,000	$ 40,000	0%
Communications, Outreach, and Public Relations	Scott County SWCD Outreach and Education	$ 2,400	$ -	$ 2,400	$ 2,300	4%
Communications, Outreach, and Public Relations	Communication and Outreach Materials and Supplies, Signage	$ 10,000	$ -	$ 10,000	$ 7,500	33%
Communications, Outreach, and Public Relations	Local Standards/Ordinance and Turf/Salt Workshops	$ 4,000	$ -	$ 4,000	$ 2,500	60%
Communications, Outreach, and Public Relations	Children's Water Festival Support	$ 750	$ -	$ 750	$ 600	25%
Communications, Outreach, and Public Relations	Watershed Partners	$ 5,000	$ -	$ 5,000	$ 5,000	0%
Communications, Outreach, and Public Relations	Stewardship Grant Program	$ 25,000	$ -	$ 25,000	$ 25,000	0%
Regulation	VRW Staff Standards Assistance, Engineering/Environmental Review	$ 73,000	$ -	$ 73,000	$ 45,000	62%
Feasibility & Preliminary Engineering	Preliminary Design, Technical Assistance and Marketing for Capital Improvements (Dakota SWCD)	$ 35,000	$ -	$ 35,000	$ 20,000	75%
Feasibility & Preliminary Engineering	Preliminary Design, Technical Assistance and Marketing for Capital Improvements (VRW staff)	$ 28,000	$ -	$ 28,000	$ 40,000	-30%
Feasibility & Preliminary Engineering	Preliminary Design, Technical Assistance and Marketing for Capital Improvements (Partners/Consulting)	$ 135,000	$ -	$ 135,000	$ 20,000	575%
CIP and Maintenance (General)	Cost Share Programs in Dakota County (SWCD)	$ -	$ 95,000	$ 95,000	$ 60,000	58%
CIP and Maintenance (General)	Cost Share Programs in Scott County (SWCD)	$ -	$ 20,700	$ 20,700	$ 25,000	-17%
CIP and Maintenance (General)	VRW General Cost-share or Miscellaneous Grant Match	$ -	$ 150,000	$ 150,000	$ 40,000	275%
CIP and Maintenance (General)	Past projects maintenance/repair	$ -	$ 40,000	$ 40,000	$ 30,000	33%
CIP and Maintenance (General)	VRW staff construction oversight and grant development and admin	$ -	$ 122,000	$ 122,000	$ 60,000	103%
CIP and Maintenance (General)	Groundwater quantity tactics	$ -	$ 10,000	$ 10,000	New	New
East Lake Fish Management	VRWJPO cost share	$ -	$ 25,000	$ 25,000	$ 10,000	150%
FY24-25 WBIF Farmington 4th & Willow TSS	4th & Willow TSS Reduction grant pass-through	$ -	$ 71,013	$ 71,013	NA	NA
FY24-25 WBIF Farmington 4th & Willow TSS	VRWJPO cash match	$ -	$ 100,000	$ 100,000	NA	NA
South Creek Restoration Project Assistance	VRWJPO cost share	$ -	$ 65,000	$ 65,000	NA	NA
Wetland Bank Credit Sales	Braun Wetland Bank Credit Sales	$ -	$ 150,000	$ 150,000	$ 100,000	50%
Total Expenditures		**$ 1,142,650**	**$ 848,713**	**$ 1,991,363**	**NA**	**NA**
NA	NA	NA	NA	NA		

Revenue Budget Category	Revenue Budget Activity	NA	NA2	Revenue Total
Braun Wetland Bank Credit Revenue	NA	NA	NA	$ 150,000
Use of Fund Balance	NA	NA	NA	$ 517,046
Grant Revenue	NA	NA	NA	$ 142,181
Dakota County Levy	NA	NA	NA	$ 1,090,798
Scott County Levy	NA	NA	NA	$ 41,338
Investment Earnings	NA	NA	NA	$ 50,000
Total Revenues	**NA**	**NA**	**NA**	**$ 1,991,363**