



2013 ANNUAL ACTIVITY REPORT AND FINANCIAL STATEMENT





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Vermillion River Watershed
Joint Powers Organization
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Phone: 952-891-7000
www.vermillionriverwatershed.org

April 2014

ACTIONS BY THE VERMILLION RIVER WATERSHED JOINT POWERS BOARD IN 2013

January

VRW 13-01: Election of Officers

VRW 13-04: Reappointment of Ron Mullenbach and Lance Twedt to the Vermillion River Watershed Planning Commission (WPC) for a Second Term

VRW 13-05: Authorization to Execute a Joint Powers Agreement with Dakota County SWCD for Services in 2013

February

VRW 13-08: Granting a Vermillion River Watershed Joint Powers Organization (VRWJPO) Permit to Terri Petter for Construction of a Hog Shed in Eureka Township

VRW 13-09: Authorization of a Grant Agreement with Friends of the Mississippi River (FMR) for the Vermillion River Stewards Program

VRW 13-10: Authorization to Execute a Joint Powers Agreement with Scott County Soil and Water Conservation District (SWCD) for Services in 2013

VRW 13-11: Authorization to Reserve Booth Space for the Vermillion River Watershed Joint Powers Organization (VRWJPO) at the 2013 Dakota County Fair

VRW 13-12: Authorization to Execute a Contract with the Minnesota Department of Natural Resources (DNR) to Collect and Compile Discharge Data and Develop Rating Curves at Sites on the Vermillion River and to Amend the Vermillion River Watershed Joint Powers Organization (VRWJPO) 2013 Budget

March

VRW 13-15: Granting a Vermillion River Watershed Joint Powers Organization (VRWJPO) Permit to Charles and Kathleen Kauffman for Construction of an Addition to their House in Eureka Township

April

VRW 13-18: Approval of Proposed Amendments to the Vermillion River Watershed Joint Powers Organization (VRWJPO) 2013 Budget

VRW 13-19: Authorization to Execute a Contract with Wenck Associates, Inc., for Fish Sampling in 2013 to Support the Vermillion River Watershed Joint Powers Organization (VRWJPO) Biomonitoring Plan

VRW 13-20: Authorization to Submit 2012 Vermillion River Watershed

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- V. Civic Engagement Process Report

Joint Powers Organization (VRWJPO) Annual Activity Report and Financial Statement to the Minnesota Board of Water and Soil Resources (BWSR)

May

VRW 13-23: Approval of Fourth Annual VRWJPO Watershed Tour Projected Costs

VRW 13-24: Approval of Update to VRWJPO Capital Improvement Project (CIP) Cost-Share Process

June

VRW 13-27: Granting a Vermillion River Watershed Joint Powers Organization (VRWJPO) Permit to Bob Fredrickson for Construction of a Pole Shed in Eureka Township

VRW 13-28: Authorization to Execute a Joint Powers Agreement with the Cities of Farmington and Lakeville to Cost Share Updates of Local Stormwater Models to Conform to the VRWJPO Flow Standards

VRW 13-29: Adopt a Resolution of Support for the Lake Marion – South Creek Regional Greenway

VRW 13-30: Authorization to Begin the Planning Process for the 2015 Update of the Vermillion River Watershed Plan

VRW 13-31: Authorization to Support the 2013 Metro Area Children's Water Festival

July

VRW 13-34: Grant a Vermillion River Watershed Joint Powers Organization (VRWJPO) Permit for Flickinger Construction of a House and Garage in Eureka Township

VRW 13-35: Schedule a Public Hearing to Receive Comments on the VRWJPO 2014 Budget and Special Tax District Levy

VRW 13-36: Authorization to Amend the Agreement with the Minnesota Pollution Control Agency (MPCA) for the Vermillion River Watershed Restoration and Protection Plan (WRAPP) and Amend the VRWJPO 2013 Budget

VRW 13-37: Authorization to Amend the Joint Powers Agreement with Dakota County Soil and Water Conservation District (SWCD) for Additional Services in 2013

VRW 13-38: Approval of Request by the Watershed Planning Commission (WPC) to Remove a Member and Recruit to Fill Two Open Terms

VRW 13-39: Authorization to Execute a Joint Powers Agreement with the City of Lakeville for Cost Share of the Water Quality Improvement Project at Lake Marion South Ponds

VRW 13-40: Authorization to Submit the Draft Final Report on the Section 319 Stream Cooling Demonstration Project to the MPCA

August

VRW 13-43, VRW 13-44: Conduct a Public Hearing to Receive Comments on and Adoption of the Preliminary VRWJPO 2014 Budget and Special Tax District Levy

VRW 13-45: Authorization to Issue a Request for Proposals (RFP) for Regulatory Program Evaluation and Review

VRW 13-46: Approval of a Change to the VRWJPO Permitting Criteria for Erosion and Sediment Control

September

VRW 13-49: Schedule and Public Notice an Initial Planning Meeting to Develop Priorities and Issues for the 2015 Update of the Vermillion River Watershed Plan

VRW 13-50: Authorization to Execute a Joint Powers Agreement with the MPCA for Phase II of the Watershed Restoration and Protection Strategy (WRAPS) Investigation and Amend the VRWJPO 2013 Budget

VRW 13-51: Authorization to Amend the VRWJPO 2013 Budget to Transfer Funds from the Capital Improvement Project Category to the Minnesota Board of Water and Soil Resources (BWSR) Clean Water Fund Category

October

VRW 13-54: Authorization to Execute an Agreement with the U.S. Geological Survey (USGS) for Operation and Maintenance of the Gaging Station at Blaine Avenue

VRW 13-55: Authorization to Execute a Joint Powers Agreement with Dakota County Environmental Resources for Groundwater Monitoring, Studies, and Public Outreach and Communication Services in 2014

VRW 13-56: Authorization to Execute a Contract with Emmons & Olivier Resources for Regulatory Program Evaluation and Review Services

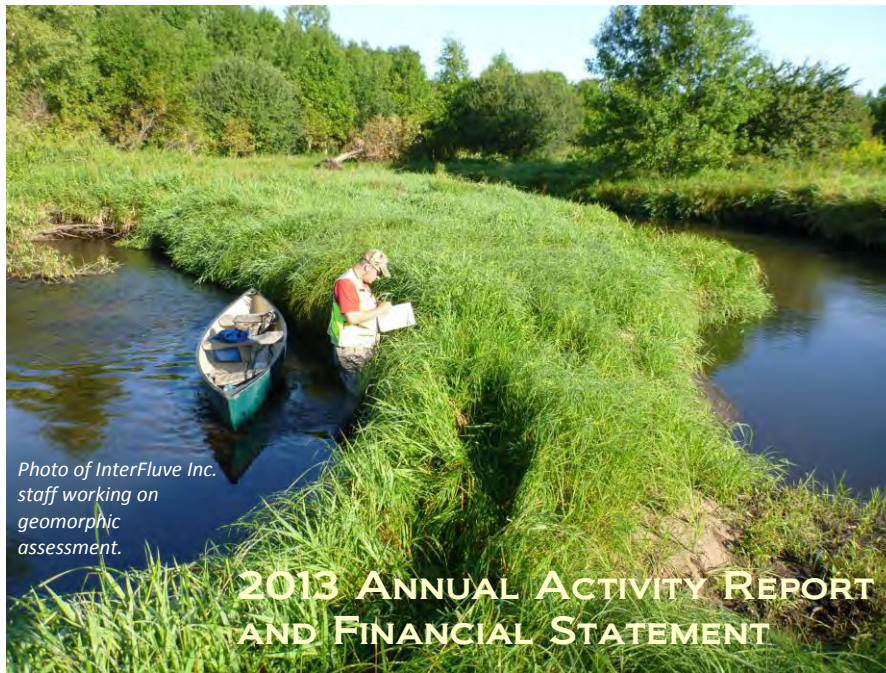
VRW 13-57: Authorization to Execute a Contract with University of Wisconsin Stout for Analysis of Phosphorus in Lake Sediments

December

VRW 13-60: Adoption of 2014 VRWJPB Meeting Schedule

VRW 13-61: Approval of Final VRWJPO 2014 Budget

VRW 13-62: Granting a VRWJPO Permit to Chad Harmer for a House and Garage Construction Project in Eureka Township



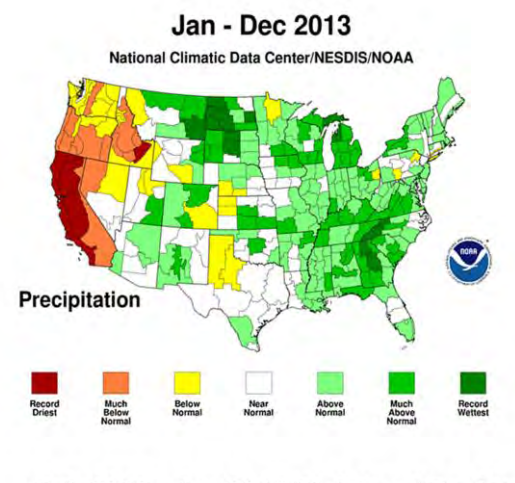
INTRODUCTION

The Vermillion River winds through rural, suburban, and urban landscapes from its headwaters in Scott County to its confluences with the Mississippi River at Hastings and Red Wing. The river drains 335 square miles of land, and 20 cities and townships are entirely or partly within the watershed boundary. Approximately 49 miles of the Vermillion River main stem and tributaries are designated trout streams, making the river a unique natural resource among rapidly growing metropolitan areas throughout the nation.

In 2002, Dakota and Scott Counties signed a Joint Powers Agreement to form the Vermillion River Watershed Joint Powers Organization (VRWJPO) and manage the watershed as required by Minnesota law (Minn. Stat. Chapter 103B.201). A Vermillion River Watershed Joint Powers Board (VRWJPB), consisting of two Dakota County Commissioners and one Scott County Commissioner, makes decisions about administering the watershed, implementing the Watershed Plan, and undertaking activities to preserve and improve water quality, quantity, and safety. A nine-member citizen advisory Watershed Planning Commission (WPC) supports and advises the VRWJPB in developing and implementing the Watershed Plan. The VRWJPO also consults with a Technical Advisory Group (TAG), consisting of local and state government partners, to discuss emerging scientific, technical, and policy impacts on the Vermillion River Watershed.

Another wet spring...

Precipitation was much above normal in southeastern Minnesota, with late snowfall and heavy spring rains delaying planting in the agricultural areas of the Vermillion River Watershed.



The VRWJPO is staffed with an administrator from Dakota County and a co-administrator from Scott County; other Dakota and Scott county staff members provide support.

The counties' respective Soil and Water Conservation Districts (SWCDs) provide extensive marketing and technical assistance services for the VRWJPO, and additional support is provided through contracts with consultants.

Dakota and Scott counties established special tax district levies within their portions of the watershed to provide the primary funding for watershed planning and activities. Dakota County contributes 96.5 percent and Scott County 3.5 percent of the total VRWJPO management costs. This *2013 Annual Activity Report and Financial Statement* summarizes the VRWJPO's activities in 2013 and its plans for 2014 on behalf of the citizens of the Vermillion River Watershed.

Vermillion River Watershed Joint Powers Board (VRWJPB) (during 2013)

- ▣ Commissioner Paul Krause, Dakota County District 6 (Chair), 18099 Judicial Way N., Lakeville, MN 55044
- ▣ Commissioner Tom Wolf, Scott County District 2 (Vice-chair), 19225 Foxfield Drive, Prior Lake, MN 55372
- ▣ Commissioner Mike Slavik, Dakota County District 1 (Treasurer), 701 5th Street West, Hastings, MN 55033

Watershed Planning Commission (WPC) (during 2013)

A nine-member WPC consisting of citizens of the watershed appointed by the VRWJPB advises the Board regarding its duties under the Joint Powers Agreement. The WPC is responsible for guiding implementation of the Watershed Plan, annual work plan, and budget. The WPC also recommends actions regarding disputes that occur over the elements of the Joint Powers Agreement. The WPC members during 2013 were:

- ▣ Chuck Clanton, Chair, 23005 Lewiston Boulevard, Hampton, MN 55031
- ▣ Joe Beattie, Vice-chair, 12770 200th Street East, Hastings, MN 55033
- ▣ Kyle Andes, 14540 Blackberry Way, Rosemount, MN 55068 (vacated position July 2013)
- ▣ John Glynn, 207 Maverick Avenue, New Market, MN 55054 (resigned position September 2013)
- ▣ Ron Mullenbach, 9816 211th Street West, Lakeville, MN 55044
- ▣ Lance Twedt, 1393 Jefferson Street, Hastings, MN 55033
- ▣ Andrew Stehr, 5226 215th Street East, Hampton, MN 55031



Commissioners on tour
*4th annual Watershed Tour highlights
Empire Plant's green roof*

The Vermillion River Watershed Joint Powers Board listens to Metropolitan Council Environmental Services staff describes advantages and challenges of installing and maintaining a green roof to manage stormwater runoff. Board members participating in the tour include (left to right) Scott County Commissioner Tom Wolf, Dakota County Commissioner Paul Krause, and (fourth from left) Dakota County Commissioner Mike Slavik.

- Jackie Dooley, 313 Walnut Street, Farmington, MN 55024
- Vacancy

VRWJPO Administrators and Staffing

The VRWJPO is housed in the Dakota County Environmental Resources Department, and Dakota County is responsible for its overall administration. Each county provides a VRWJPO co-administrator to work on watershed issues, and other Dakota and Scott county staff provides support for specific projects.

- Mark Zabel, VRWJPO Administrator (Dakota County),
14955 Galaxie Avenue, Apple Valley, MN 55124, Phone: 952-891-7011, Fax: 952-891-7031,
mark.zabel@co.dakota.mn.us
- Melissa Bokman, VRWJPO Co-administrator (Scott County),
200 Fourth Avenue West, Shakopee, MN 55379, Phone: 952-496-8887, Fax: 952-496-8496,
mbokman@co.scott.mn.us
- Travis Thiel, Watershed Specialist (Dakota County),
14955 Galaxie Avenue, Apple Valley, MN 55124, Phone: 952-891-7546, Fax: 952-891-7031,
travis.thiel@co.dakota.mn.us
- Paula Liepold, Water Education Specialist (Dakota County),
14955 Galaxie Avenue, Apple Valley, MN 55124, Phone: 952-891-7117, Fax: 952-891-7031,
paula.liepold@co.dakota.mn.us
- Katherine Carlson, Water Resources Specialist (Dakota County),
14955 Galaxie Avenue, Apple Valley, MN 55124, Phone: 952-891-7086, Fax: 952-891-7031,
katherine.carlson@co.dakota.mn.us

Legal Consultant

The VRWJPO employs the services of the Dakota County Attorney's Office for consultation on legal and contractual matters, including revisions to the Watershed Plan, Rules, and Standards. The current attorney assigned to the VRWJPO is:

- Helen Brosnahan, Assistant County Attorney, 1560 Hwy. 55, Hastings, MN 55033, Phone: 651-438-4404, helen.brosnahan@co.dakota.mn.us

Technical Advisory Group (TAG)

The TAG consists of agencies and organizations with interest and expertise in watershed issues. The TAG meets quarterly to discuss projects and policies from a scientific and technical perspective. Representatives include, but are not limited to:

- Cities and townships within the Vermillion River Watershed;
- Dakota and Scott counties;
- Dakota and Scott County SWCDs;
- Metropolitan Council;

- ❑ Minnesota Pollution Control Agency (MPCA);
- ❑ Minnesota Department of Agriculture (MDA);
- ❑ Minnesota Department of Health (MDH);
- ❑ Minnesota Department of Natural Resources (DNR);
- ❑ Minnesota Board of Water and Soil Resources (BWSR);
- ❑ Natural Resource Conservation Service (NRCS);
- ❑ Environmental Consulting Firms;
- ❑ University of Minnesota Extension; and
- ❑ Friends of the Mississippi River (FMR).

Consultants

The VRWJPO enters into contracts with Dakota and Scott County SWCDs to perform services, including design and implementation of Capital Improvement Projects, water-quality monitoring, database management, reporting, and other tasks.

- ❑ Brian Watson, Manager, Dakota County SWCD, 4100 220th Street West, Suite 102, Farmington, MN, 55024, Phone: 651- 480-7777, Email: brian.watson@co.dakota.mn.us
- ❑ Troy Kuphal, Manager, Scott County SWCD, 7151 West 190th Street, Suite 125, Jordan, MN, 55352, Phone: 952-492-5425, Email: tkuphal@co.scott.mn.us

In 2012, the VRWJPO issued a **Request for Qualifications** to develop a general consultant list for 2012-2013. The VRWJPB approved the consultant list at its March 22, 2012, meeting and the list was in effect through December 2013 (see page 5 for 2013 consultant list).

As part of the Watershed Restoration and Protection Strategy (WRAPS) investigation, the VRWJPO is working with Wenck Associates, Inc., a contractor being paid by the MPCA using Clean Water Funds. Civic engagement planning and activities performed by Dakota County and VRWJPO staff are also being reimbursed by the MPCA.

The VRWJPO is supporting the civic engagement activities planned for the WRAPS through staff, in-kind contributions, and a contract with Leadership Tools for independent meeting moderation for the citizen Watershed Engagement Team (WET).

In 2013, the VRWJPO issued a **Request for Proposals** to consultants for conducting a regulatory review and regulation analysis, comparing the VRWJPO's regulations to comparable watersheds. The staff selected Emmons & Olivier Resources (EOR) to conduct this analysis.

In 2013, the VRWJPO contracted with the University of Wisconsin – Stout to estimate rate of phosphorus flux in sediments and determine textural and chemical characteristics of sediments in lakes in the Vermillion River Watershed. The Request for Proposal issued in 2013 is included as Appendix I.

Consultant List for 2012-2013

Consultant	Contact	Street Address	City	State	Zip Code
American Engineering Testing	Richard Pennings	550 Cleveland Avenue North	St. Paul	MN	55114
Applied Ecological Services	Kim Chapman	21938 Mushtown Road	Prior Lake	MN	55372
Barr Engineering	Len Kremer	4700 W. 77 th St., #200	Edina	MN	55435
Bolton & Menck, Inc.	William Douglas	1960 Premier Drive	Mankato	MN	55601
Cardno JFNew	Mark Prancus	P.O. Box 1528	Eau Claire	WI	54703
Emmons & Olivier	Brett Emmons	651 Hale Avenue N.	Oakdale	MN	55128
Houston Engineering	Chris Otterness	6901 E. Fish Lake Rd., #140	Maple Grove	MN	55369
Howard R. Green Co.	Jonathon Kusa	2550 University Ave. W.	St. Paul	MN	55114
Inter-Fluve Inc.	Marty Melchior	3602 Atwood Avenue, #3	Madison	WI	53714
Liesch Associates Inc.	Warren Tuel	13400 15 th Avenue North	Minneapolis	MN	55441
Limno-Tech Inc.	Hans Holmberg	2217 Vine St., #205	Hudson	WI	54106
Mead & Hunt	Bryan Ripp	7900 West 78 th St., #370	Minneapolis	MN	55439
MSA	David Wierzba	412 Hayward Avenue N.	Oakdale	MN	55128
Schilling Consultants	Joel Schilling	46 Bertha Ct.	Mahtomedi	MN	55155
SRF Consulting Grp.	David Filipiak	One Carlson Pkwy. N., #150	Minneapolis	MN	55447
Stanley Consultants	Dave Sonnenberg	5775 Wayzata Blvd., #300	Minneapolis	MN	55416
Stantec Consulting	Bradley Schleeter	2335 Hwy. 36 West	St. Paul	MN	55113
Tetra Tech Environ.	Scott Tracy	2001 Killebrew Dr., #141	Bloomington	MN	55425
TKDA	Patrick McLamon	444 Cedar Street, #1500	St. Paul	MN	55101
Wenck Associates	Joe Bischoff	1800 Pioneer Rd. Creek Ctr.	Maple Plain	MN	55359
WSB	Todd Hubner	701 Xenia Ave. S., #300	Minneapolis	MN	55416

2013 WORK PLAN ACTIVITIES

In 2013, VRWJPO activities focused on two major investigation and planning projects that will have a significant impact on the future of the watershed.

Phase I of the Watershed Restoration and Protection Strategy (WRAPS) has identified the major stressors on watershed biota. The Phase II investigation, which began in 2013 and will be completed in 2014, will identify total maximum daily loads for key pollutants. The primary stressor, turbidity, comes from both overland flow of stormwater and in-stream/in-lake bedded sediment disturbances. Secondary stressors include lack of dissolved oxygen, hydrologic alteration, temperature, and altered habitat.

In tandem with the WRAPS scientific and technical investigation of the Vermillion River, tributaries, and lakes, staff also launched an effort to engage people who live, work, or play in the watershed in taking action to improve water quality and quantity. The VRWJPO staff met each month with a group of involved community members and leaders, the Watershed Engagement Team (WET), to develop a better understanding of local values, community capacity for civic engagement, and strategies that would work within specific locations or focus areas. The resulting civic engagement plan provides a road map for working with watershed residents on protecting and restoring water resources.

The VRWJPO also launched the process in 2013 to update the Vermillion River Watershed Plan, the 10-year implementation plan that governs the activities of the VRWJPO. The VRWJPO requested approximately 240 stakeholders in cities, townships, state agencies, and other organizations to submit issues and priorities that should be included in the plan update. In October 2013, the VRWJPO hosted a publicly noticed watershed plan kick-off meeting, soliciting further issues and priorities. Issues and priorities remaining after a half-way review of Watershed Plan implementation have



Reducing erosion in Rosemount/Flint Hills ravine

The Clean Water Fund provided a grant of \$244,000 to solve serious erosion problems in the City of Rosemount. Water from an area near the interchange at U.S. Hwy 52 and Minnesota Hwy 55 was flowing through a culvert under a Union Pacific Railroad line and spilling onto a steep bluff face at the head of a ravine. The stormwater runoff accelerated the erosion and ravine development and contributed sediment to Spring Lake and the Mississippi River.

Dakota County, Dakota County Soil and Water Conservation District (SWCD), the City of Rosemount, the Minnesota Department of Transportation (MNDOT), Flint Hills Resources, and the Vermillion River Watershed Joint Powers Organization (VRWJPO) identified a solution: a grade control structure to convey water from the top of the bluff to the bottom, eliminating further erosion of the bluff face. Ponds located at the bottom of the structure reduce scour, settle additional sediments, and promote additional water retention. A weir structure on the upstream end of the culvert will help retain and infiltrate stormwater.

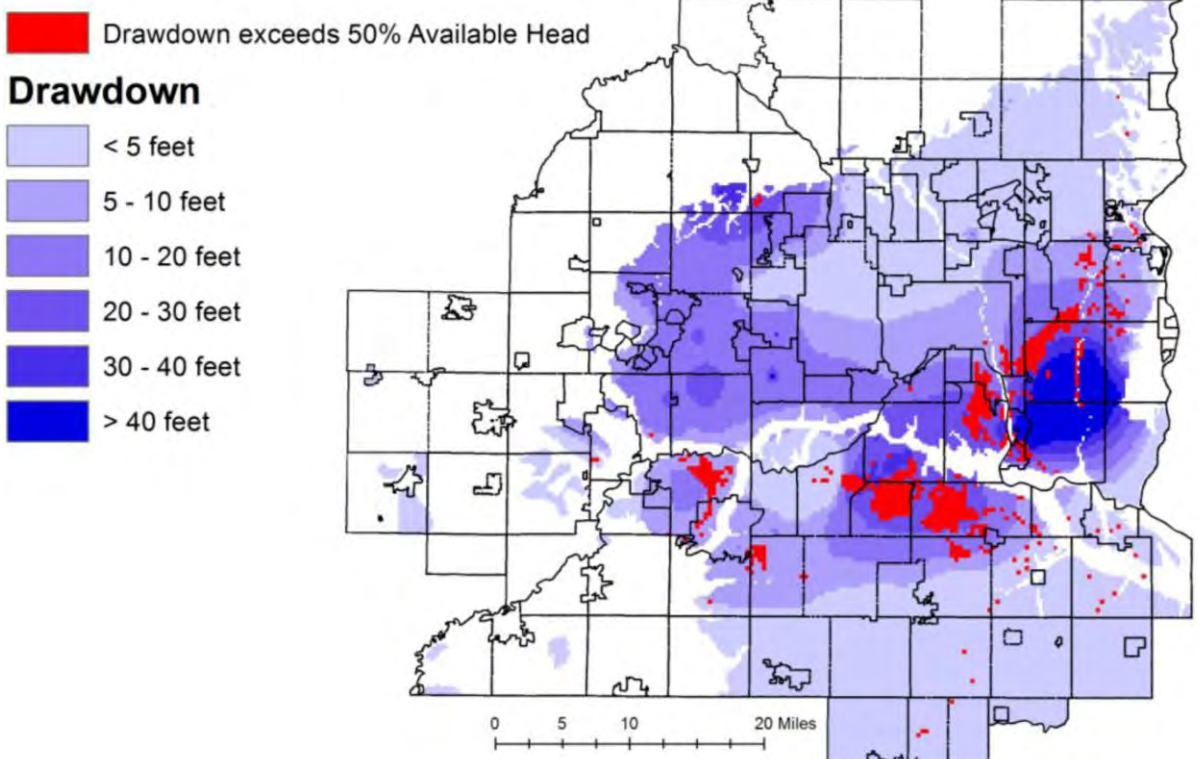
Sediment reduction to Spring Lake and the Lower Mississippi River is estimated at 82 tons/year.

been incorporated into the planning process as well. The WPC and the TAG were consulted about issues and priorities for the next 10 years to ensure the plan update deals with problems clearly identified by the public. Consultation with the public and stakeholders will occur in several phases as the 2015 Watershed Plan takes shape.

Larger economic, regulatory, scientific, and societal issues are likely to affect the Vermillion River Watershed in the coming years.

- Economic recovery, especially in the housing market, is leading to increased development proposals being submitted to the cities of Lakeville, Farmington, and Elko New Market.
- Dakota County has implemented enforcement action to achieve compliance with the 50-foot buffer requirement for DNR-designated protected waters, which has elevated interest in (and controversy about) the importance of buffer zones in the Vermillion River Watershed.
- The Metropolitan Council issued a January 2014 “Progress Report on Water Supply Planning” that sounds a cautionary note about the future availability of groundwater supplies in the Metro area.

2040 Model-projected Drawdown Prairie du Chien-Jordan Aquifer



Taken from “Progress Report on Water Supply Planning,” Metropolitan Council report, January 2014

- A major report on the impacts of nitrate in surface water completed by the MPCA suggests that proposed surface water nitrate state standards are imminent. At the same time, the MDA is revamping its statewide Nitrogen Management Plan and a Dakota County Targeted Townships Nitrate Sampling event suggests that nitrate levels in private drinking water wells in rural areas of the watershed are much higher than expected.
- The MPCA also is proposing specific reaches of the Vermillion River and its tributaries for listing as impaired for mercury.
- The National Oceanic and Atmospheric Administration (NOAA) Atlas 14, Volume 8, provides analyses of the historical frequency of heavy rainfall events, which are showing increasing precipitation frequency in Minnesota and the Midwest. These precipitation analyses will change the way engineers and others involved in designing and operating infrastructure, such as culverts and stormwater runoff ponds, will work on new development projects.
- The BWSR is seeking restored or restorable wetlands in Dakota County for the state's wetland bank, and the VRWJPO has discussed the potential for establishing a VRWJPO wetland bank.

As the landscape, population, local weather, regulatory regime, technology, and scientific consensus change, the VRWJPO will need to track and adapt to these changes.

Workshops for all seasons

The VRWJPO is partnering with Fortin Consulting Inc., Hamel, Minn., on a series of workshops for building managers, maintenance contractors, and employees working on sidewalks, parking lots and turf. The focus of each seasonal workshop is pollution prevention in the upkeep of pavement and turf grass.

Stormwater runoff from impervious surfaces, such as roads, sidewalks, and parking lots often convey de-icing salt, sand, and other pollutants to rivers, lakes, and streams. Stormwater also conveys fertilizers and pesticides from turf grass to water resources. Fortin Consulting received funding from the MPCA to offer free half-day workshops to discuss effective, low-cost methods for clearing ice from pavement and managing turf.

Fortin Consulting will provide six workshops during the next three years, with the VRWJPO covering costs of workshop location, marketing, contact tracking, and refreshments for the free workshops. Find out more at www.vermillionriverwatershed.org, search term "sidewalk maintenance" or "turfgrass management."



ADMINISTRATIVE

Administrative responsibilities include: staff recruitment, hiring, and supervision; coordinating and documenting VRWJPB meetings, decisions, and directions; coordinating and documenting WPC and TAG meetings, decisions, and recommendations; managing the budget; setting priorities; managing contracts; reporting; and seeking funding. In 2013, the VRWJPO:

- Coordinated and documented 11 VRWJPB meetings, for which Requests for Board Action and draft Joint Powers Agreements were prepared, presented, and submitted to the Board members.
- Conducted annual election of officers (Resolution VRW 13-01).
- Coordinated and documented seven WPC meetings.
- Reappointed Ron Mullenbach of Lakeville and Lance Twedt of Hastings to the WPC for three-year terms (Res. No. VRW 13-04).
- Coordinated two meetings of the TAG. One of these was a joint WPC-TAG meeting focused on agricultural drainage issues, featuring speakers on impacts of tile lines on erosion, current science on agricultural drainage, and existing/pending laws on drainage and ditches.
- Managed and reported on the VRWJPO budget, providing expense reports (including staff costs) and treasurer's reports for Board approval at VRWJPB meetings. Amended the 2013 budget to reflect changing circumstances and opportunities (Res. No. VRW 13-18).
- Submitted the *2012 Annual Activity Report and Financial Statement* to BWSR (Res. No. VRW 13-20).
- Completed VRWJPO quarterly progress reports for the VRWJPB and County management.
- Developed a proposed 2014 Work Plan, budget, and special tax district levy for public hearing and VRWJPB approval (Res. No. VRW 13-43, VRW 13-44) and final 2013 budget (Res. No. VRW 13-61).
- Set VRWJPB 2014 meeting dates (Res. No. VRW 13-60).
- Adopted a resolution of support for the Lake Marion-South Creek Greenway Plan (Res. No. VRW 13-29).
- Authorized the beginning of the planning process for the 2015 update of the Vermillion River Watershed Plan (Res. No. VRW 13-30), including a kick-off meeting in October (Res. No. VRW 13-49).
- Issued a RFP for regulatory program evaluation and review (Res. No. VRW 13-45).
- Applied for the BWSR Targeted Watershed Demonstration Program, a four-year, \$3.2 million grant focused on reducing pollutant loads in the Vermillion River South Branch. The grant proposal did not lead to the next step in the grant process, an interview about the project.
- Attended leadership track training and educational activities to develop enhanced management skills.

New Dakota County Environmental Resources Department and Director

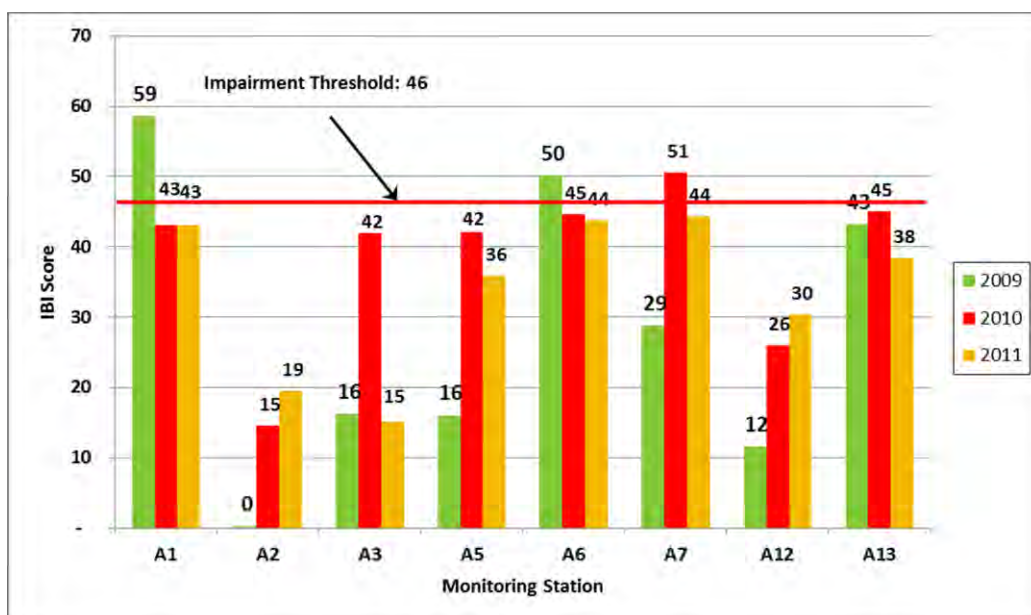
Dakota County is the fiscal, human resources, and management agent for the VRWJPO, and in 2013 the county reorganized waste and water programs into the new Environmental Resources Department (ERD). In May, Georg Fischer was recruited to lead the ERD. He is the former environmental manager for the 133rd Airlift Wing of the Minnesota Air National Guard; research scientist and industrial hygienist for the Minnesota Department of Health, Environmental Health; director of Environmental Programs, American Lung Association of Minnesota; and indoor air quality specialist, St. Paul/Ramsey County Department of Public Health. He also serves in the Air National Guard as the chemical, biological, radiological, nuclear and high yield explosive (CBRNE) enhanced response force package (CERFP) Medical Element Commander of a 47-person Medical Unit.

MONITORING AND DATA ANALYSIS

Water quality and quantity monitoring data are essential for effective management of the Vermillion River Watershed. Surface water and groundwater monitoring allow the VRWJPO to determine the current condition of the resource, any trends (positive or negative) occurring over time, highest priorities for protection and restoration, and the effectiveness of water-quality improvement activities. The following activities reflect the VRWJPO's commitment to evidence-based watershed management.

- ❑ **Vermillion River Monitoring Network** – Dakota and Scott County SWCDs sample, maintain, and upload information to statewide databases from the Vermillion River Monitoring Network, reporting annually to the VRWJPO and citizens on the river's condition and trends. The SWCDs' staff collected water samples and monitored for ammonia, nitrate/nitrite, total Kjeldahl nitrogen, total phosphorus, dissolved phosphorus, total suspended solids (TSS), volatile suspended solids, pH, turbidity, chlorophyll, *E. coli*, hardness, dissolved oxygen, and conductivity. Nitrate and TSS pollutant loads were calculated using the FLUX stream load computation tool (Walker, 1999) for the 2013 monitoring season (March-November), for each monitoring station and/or associated tributary. Water temperature is continuously monitored throughout the summer months using automated temperature loggers at 32 locations. A summary of results for the 2013 monitoring season are included as Appendix II, *Vermillion River Monitoring Network 2013 Report Executive Summary*.
- ❑ **Biomonitoring Plan** – In 2013, the VRWJPO continued implementing the watershed's Biomonitoring Plan, developed in 2009 to provide both baseline data and an ongoing assessment of the watershed's health through fish sampling (with the DNR), and biological and habitat monitoring (with Dakota County SWCD) at 14 locations throughout the watershed. The VRWJPO received and had a consultant apply the new statewide Index of Biological Integrity (IBI) for macroinvertebrates to years of the Vermillion River Watershed's existing data. The results are shown below (anything below the red line is impaired).

Index of Biological Integrity (IBI) Scores for Macroinvertebrates, 2009-2011



Macroinvertebrate monitoring provides a window on water quality that is extremely valuable in assessing stream health. Macroinvertebrates are sensitive to ecosystem changes, live in an ecosystem more than a year, can't escape changes in water quality, and can be collected easily and inexpensively. Low IBI scores at Vermillion River Watershed sites are driven by an abundance of pollution-tolerant species and a limited number of pollution-sensitive species.

Overall, the 14 monitoring sites within the Vermillion River Watershed show consistency in scores under the new MPCA Statewide IBI scoring protocol. In general, the warmwater streams in the Southern Headwaters Category had consistently high scores (not impaired) and showed very little variation in the scores from year to year. The monitoring reaches within the Southern Coldwater and Southern Streams categories also scored consistently under the new IBI protocol, in general scoring as impaired, with little variation across monitoring years.

- ▣ **Drinking Water Monitoring** – Dakota County manages several ongoing programs to monitor and address water quality in private drinking water wells, including support of agricultural research activities on fertilizer management and agricultural outreach supported in part by the VRWJPO.

Dakota County has widespread issues with nitrate and pesticides detected in private drinking water wells in the rural parts of the County, especially around the City of Hastings. In 2013, a special monitoring project in targeted townships increased concerns about nitrate in the County and watershed.

The MDA is revamping its 20-year-old Nitrogen Fertilizer Management Plan and wants to assess and improve the problem of nitrate in groundwater in agricultural areas. MDA contracted with Dakota County to offer free water tests for nitrate in townships and cities that were “targeted” based on their geological vulnerability to groundwater contamination and the percentage of their land in agriculture.

Using an independent lab, Dakota County mailed more than 3,100 test kits and surveys to private well owners in Castle Rock, Douglas, Hampton, Marshan, Nininger, Randolph, Sciota, Vermillion, and Waterford Townships, plus the cities of Coates, Hampton, Hastings, and Vermillion.

The results of the Targeted Township Nitrate Sampling include:

- 741 samples have been sent to the lab and analyzed (24 percent response).
- 223 of the 741 samples (30 percent) exceeded the drinking water standard of 10 mg/L.
- The highest result to date has been 69 mg/L from a well in Douglas Township.
- 10 of the 741 results (1 percent) exceeded 30 mg/L. Most of these are in Douglas Township.

Dakota County has prepared a Community Drinking Water Profile for each participating city and township. At the township level, the results will be used to educate farmers and the public about

the extent of the problem in each community. Additional sampling, also using funding from MDA, will be conducted in 2014.

- **The Ambient Groundwater Quality Study** is a county-wide drinking water monitoring program partially supported by the VRWJPO, with sampling events occurring every other year. These wells are tested for general water-quality parameters, nitrate, pesticides and pesticide breakdown products. In 2013, 65 Ambient Groundwater Study wells were sampled as part of the ongoing study that began in 1999. This past year, the well samples were analyzed for general chemical parameters: pH, dissolved oxygen, specific conductance, iron, alkalinity, nitrate, nitrite, fluoride, chloride, sulfate, total kjeldahl nitrogen, calcium, magnesium, sodium and total organic carbon. Twenty-six of the 65 wells were selected to have water samples analyzed for list of 33 pharmaceuticals and list of acetamide and triazine herbicides, including herbicide breakdown products, used to control weeds on soybean and corn crops. Because some of the wells have 13 years of water-quality data, statistically significant trends can be identified; trend analysis is being conducted on the nitrate, chloride, sulfate and sodium data. A draft report will be available mid-year 2014.
- **Maintaining Monitoring Infrastructure** – The VRWJPO provides cost share to maintain the USGS Blaine Avenue flow-gaging station and contracts annually with specialists at the DNR for assistance with maintenance and rating-curve development at its seven other automated flow-monitoring stations.

PUBLIC OUTREACH AND COMMUNICATION

Communicating the value of clean water to stakeholders and citizens continues to be a critical part of the VRWJPO's mission and civic engagement has taken on a greater importance in state processes. The VRWJPO has maintained its previous outreach efforts while adding new strategies to increase awareness and action among the public. The additional communication efforts in 2013 have focused on two major goals: increase public awareness and civic engagement to restore impaired waters, and encourage active participation by citizens and stakeholders in development of the 2015 update of the Vermillion River Watershed Plan. (Details of these large-scale public outreach and communication initiatives are covered in the **Watershed Restoration and Protection Strategy** and **Evaluation and Policy** sections of this report.)

Public outreach and communication takes many forms, including ensuring that the public understands what a watershed is, how the Vermillion River Watershed is different from other watersheds, what problems exist, how we can work together to find solutions, how citizens can engage in protecting the watershed, and what resources are available to assist in achieving watershed goals. Among the outreach and communication programs partially funded or conducted by the VRWJPO in 2013:

- **Wetland Health Evaluation Program (WHEP)** – Participating cities each select up to four wetlands to be monitored each season by trained volunteers. The Minnesota Pollution Control Agency trains

volunteer teams on wetland monitoring protocols, as well as macroinvertebrate and plant identification. The program turns volunteers into “citizen scientists”; it is an excellent opportunity for environmental education and natural resource information gathering.

In 2013, ten cities participated in WHEP, monitoring 31 different wetlands. Five wetlands were monitored for the first time in 2013. Volunteers collected data on the macroinvertebrates and plants that live in the wetlands, identified the species, and used the Index of Biotic Integrity (IBI) to estimate the health of each wetland. Four wetlands rated excellent for invertebrates, while only one rated excellent for vegetation. Overall, wetland conditions for invertebrates improved in 47 percent of wetlands and declined in 13 percent. Vegetation improved in 27 percent of the wetlands monitored, while 13 percent showed declining vegetation. WHEP volunteers donated more than 1,490 hours in training, sample collection and sample identification in completing this valuable monitoring. Teams report to the sponsoring cities on wetland health within their jurisdictions at the end of the monitoring cycle.

▣ **Vermillion River Watershed Stewards**

Program – Vermillion River Watershed Stewards Program is implemented by the Friends of the Mississippi River (FMR) and partially funded by the VRWJPO. Volunteers and interested citizens participate in hands-on stewardship and educational programs throughout the Vermillion River Watershed. These include native plantings, seed collection, river cleanup events, and educational tours of interesting natural resource areas. The program provides a great way for watershed residents to actively help protect the Vermillion River. The Stewards program involves partnerships with local cities, SWCDs, schools, and other civic and youth organizations.

In 2013, FMR organized 13 public and private stewardship events and three educational tours with 355 total participants spending 489 volunteer hours on learning about the watershed and participating in events. FMR surveys volunteers annually, and of the volunteers who responded, 61 percent live in the Vermillion River Watershed, 38 percent

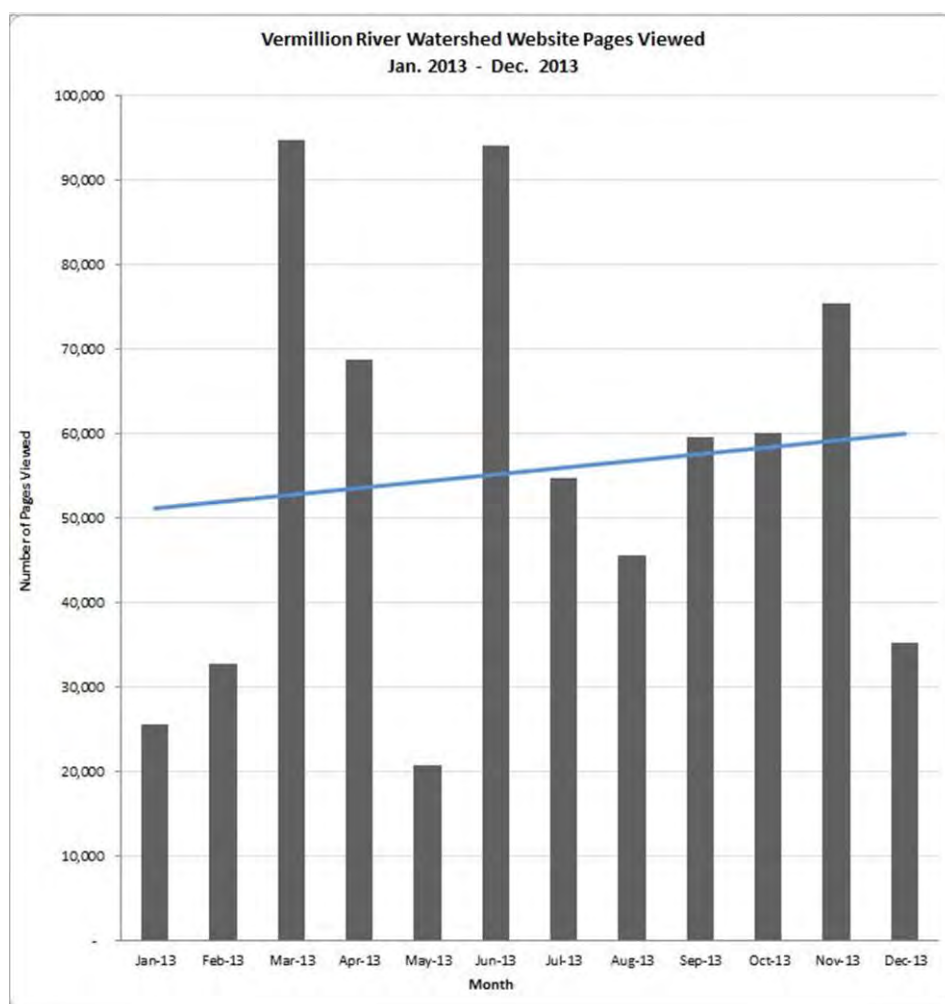


Willow staking by the ‘Beattie bunch’ in Vermillion Stewards Linear Park restoration

Hastings High School Students, with Biology teacher Joe Beattie, joined the Vermillion Stewards in a willow-staking event at Linear Park in the City of Hastings. Steep banks lose soil to the Vermillion River, and planting willow wands will help to stabilize and shade the shoreline. The wands are cut from a living tree and many root and hold the soil in place.

had participated in the Stewards for four or more years, and 31 percent were new participants in Stewards events.

- **Vermillion River Watch** – Dakota SWCD worked with educators and students at Rosemount and Hastings High Schools to collect macroinvertebrates and habitat data, identify macroinvertebrates, and compare species type and abundance to biological metrics. The goal: to give students insight into the various methods of measuring the river’s health and the network of living things dependent upon water quality.
- **Blue Thumb Workshops** – The VRWJPO maintained its support in 2013 for the successful Blue Thumb program (implemented by Dakota and Scott SWCDs) to educate citizens about the benefits of raingardens in improving water quality and assisting to design and install raingardens. Dakota SWCD held five introductory Blue Thumb workshops that attracted 122 residents and four design workshops with 52 people attending in 2013. This effort resulted in 24 project designs, 17 applications for Blue Thumb grants, 17 projects funded, and 13 raingardens, shoreline restorations, or native garden projects completed. The Blue Thumb program drives 80 percent of Dakota SWCD’s inquiries for larger conservation projects in the watershed, and is the most effective outreach tool for reaching residents with an interest in hands-on implementation of their own water-quality projects. Scott SWCD also offers Blue Thumb workshops and native planting workshops that cover the Elko New Market/New Market Township portion of the watershed.
- **Publications** – In 2013, the VRWJPO continued to bring more newsletter readers to the website through an e-newsletter, while continuing to publish the newsletter for print readers. The newsletter is provided to residents in the watershed twice a year (see Appendix III for the Spring and Fall 2013 issues). The VRWJPO’s beneficial activities and educational messages are also featured in news media reports, internal and external newsletters, websites in Dakota and Scott counties, and other publications. The VRWJPO and Dakota County SWCD summarize each capital improvement project completed with VRWJPO cost share (Appendix IV) and develop Frequently Asked Questions fact sheets to explain watershed standards and policies to citizens.
- **Website** – The VRWJPO has continued to build its website in 2013 to provide easily accessible information about the watershed to a wide range of users. The website, www.vermillionriverwatershed.org, features an up-to-date calendar of VRWJPO meetings, volunteer opportunities, and public events. An interactive map shows users where the VRWJPO has implemented or cost-shared capital improvement projects. The “Doing Business” website category provides VRWJPB and WPC agendas and minutes, frequently asked questions (FAQs) about policy issues, instructions on permit application, criteria for cost sharing projects, and other helpful information. In the “Learn” category, visitors can find out about monitoring data, assessments, and studies. The website has been very successful in conveying information to users, as indicated by the number of web pages viewed over time. At the suggestion of users, the VRWJPO has drafted an improved website structure to incorporate more educational information for citizens and other stakeholders.



- ▣
Fourth Annual Vermillion River Watershed Tour – VRWJPB, Scott and Dakota County commissioners, and other elected officials toured locations where they could observe best management practices and projects cost-shared by the VRWJPO. On September 20, 2013, local officials visited: the Empire Wastewater Treatment Plant in Empire Township, where the Metropolitan Council Environmental Services has installed best management practices for stormwater runoff, including a green roof, pervious pavement, raingardens, and native plantings; Low Impact Development practices installed at the Hampton Fire Station; 250th Street Channel restoration site in Lakeville; and the Dakota County Agricultural Society easement where substantial restoration and improvement make the area a valuable educational and recreational resource for surrounding communities.

- ❑ **Mississippi Makeover Outreach and Stakeholder Involvement** – Dakota SWCD has been coordinating a project to plan a healthy and protected ecosystem in Spring Lake, the Lower Vermillion River, and Pool 3 of the Mississippi River. The VRWJPO provides support for these outreach efforts by Dakota SWCD.
- ❑ **Agricultural Outreach and BMP Marketing in the South Branch** – Dakota County partners with the University of Minnesota Extension to work with agricultural producers on: management of fertilizers and pesticides; demonstration projects; the Annual Crops Day and Field Day events, bringing together farmers with experts in agricultural sciences for an all-day discussion of issues and trends; a newsletter with information about effective agricultural strategies; and other efforts to improve water quality and land conservation. In 2013, the VRWJPO partially supported this effort, with particular focus on the South Branch, where high levels of nitrate have been documented in surface water.
- ❑ **Community Event Participation** – In 2013, the VRWJPO participated in the City of Farmington’s Earth Day/Arbor Day Celebration and the City of Lakeville’s Clean-up Event, providing a watershed version of the popular “Jeopardy” game show that challenged both adults and children to learn more about water quality, habitat, and wildlife in the Vermillion River watershed.
- ❑ **Partnership Building and Collaborative Efforts** – The VRWJPO continued to support WaterShed Partners, a coalition of watershed organizations, cities, and interest groups providing effective water-oriented messages to the general public. The VRWJPO was approached by Fortin Consulting Inc. to provide in-kind support for six free workshops on parking lot, sidewalk, and road maintenance and summer turfgrass maintenance (see page 8).
- ❑ **Scott Clean Water Education Program** – Scott SWCD focused activities, outreach, and publicity on the overall theme of “Clean Water Starts With Me.” The native plant focus by Scott SWCD at both the New Prague Business Expo and Scott County Earth Day celebrations drew hundreds of interested residents.



Thirty-five agricultural producers and Certified Crop Advisors attended the Dakota County Field Day, held August 13, 2013, at an on-farm research site south of Hastings. Dave Nicolai and Betsy Schacht (in photo above), both from the University of Minnesota Extension, led a clinic on identifying corn rootworm damage and discouraging pesticide resistance. The Dakota County Field Day was sponsored by Dakota County and the University of Minnesota Extension and funded in part by the Minnesota Department of Agriculture and U.S. EPA.

INVENTORY/ ASSESSMENT

The VRWJPO supports inventories of land, water, and groundwater features and investigates the causes and status of existing or emerging issues. Projects begun, continued, or completed in 2013:

- ▣ **Watershed Restoration and Protection Strategy Investigation (WRAPS)** – The WRAPS Phase I investigation was completed and Phase II begun in 2013. See the WRAPS category for more information.
- ▣ **Vermillion River Watershed Plan 2015 Update** – The VRWJPO began collecting data from a wide variety of stakeholders for the issues and priorities and assessment portions of the Watershed Plan update. See Evaluation and Policy for more information.

CAPITAL IMPROVEMENT PROJECTS

The VRWJPO wants to ensure that Capital Improvement Projects (CIPs) with direct and observable benefits to water quality, quantity, and safety are identified and developed. Through cost-share programs, the VRWJPO provides assistance and incentives for Local Government Units and other partners seeking effective solutions to local water-quality problems. In 2013, the VRWJPO updated its CIP cost-share process to establish two application periods for proposals and to make the process more competitive.

In 2013, these CIPs included:

- ▣ **Dakota SWCD Cost Share Programs** – Dakota SWCD receives funding from the VRWJPO to implement a variety of cost-share programs to improve water quality. These include:
 - **Blue Thumb Grant Program** – Blue Thumb combines incentive funding with training and technical assistance to make it easy for Dakota County residents to plan and install native gardens, raingardens, and stabilized shorelines. Dakota SWCD conducted five introductory workshops and four design courses in 2013. Seventeen raingardens, native gardens, and native shoreline projects were established with the assistance of Blue Thumb grants and other grants.
 - **Conservation Initiative Funding Program** – Developers interested in installing practices that protect water quality, improve habitat, manage stormwater, and prevent erosion can receive up to \$20,000 for project costs. The Dakota SWCD cost-shared one development project in 2013. Two bioretention cells totaling 8,600 square feet fitted with iron-enhanced sand filters were constructed between an existing stormwater pond and Long Lake to create a three-step stormwater treatment system. The funding from the VRWJPO was \$40,000 of the \$136,284 total project costs.
 - **Incentive Payment Practice Program** – This program leverages state and federal dollars to improve feedlots and other agricultural land. The Dakota SWCD provided technical assistance on three projects in 2013, filter strips in Eureka Township, grassed waterway

and critical area planting in Vermillion Township, and a raingarden in Lakeville. The VRWJPO provided \$16,137 of the total cost of \$102,705.

Cost-share projects completed with Dakota SWCD assistance and VRWJPO funding are listed below. Fact sheets describing these projects in more detail are available in Appendix IV.

- 12-CIF-05: Apple Valley Long Lake Iron-Enhanced Sand Filter
 - 12-IPP-08: Greg Stoffel Grassed Waterway and Critical Area Planting
 - 13-IPP-03: Ben Boyum Filter Strips
 - 13-IPP-04: Vandenbusch Raingarden
 - 13-APV-065: Roberts Native Garden
 - 13-APV-066: Reiners Raingarden
 - 13-APV-067: Grotjohn Native Garden
 - 13-APV-070: Kutschied Raingarden
 - 13-APV-073: Morical Raingarden
 - 13-APV-078: Young Raingarden
 - 13-APV-095: Collins Native Garden
 - 13-FRM-063: Winkels Raingarden
 - 13-LKV-060: Lewis Raingarden
 - 13-LKV-064: Steuart Raingarden
 - 13-LKV-072: Piehl Raingarden
 - 13-LKV-079: Filipa Raingardens
 - 13-VER-068: Nelson Native Planting
- **Rosemount Cost Share Joint Powers Agreement** – The VRWJPO entered a joint powers agreement with the City of Rosemount in 2007, which required cost share related to the storm drainage improvement project commonly referred to as Eagan Project 905R, a major project that involved Dakota County’s Lebanon Hills Regional Park stormwater management. The VRWJPO agreed to cost share in a principal amount of \$544,829, to be repaid over ten years in ten equal annual installments of principal with interest being paid on each principal payment at the rate of four percent per year. In 2013, the VRWJPO continued to provide these cost-share payments.
- **Rosemount/Flint Hills Ravine Restoration** – The VRWJPO applied for and received Clean Water Fund dollars to install the Rosemount/Flint Hills Ravine Restoration project. See page 6 for details.
- **Lake Marion Stormwater Pond Retrofit and Iron-Enhanced Sand Filter Phosphorus Reduction Project** – The VRWJPO, the City of Lakeville, and Dakota SWCD partnered to evaluate a 72-acre subwatershed and existing stormwater management system and develop a solution to reduce the amount of phosphorus reaching Lake Marion. One existing pond was being bypassed, a second pond had a layer of clay limiting the potential for infiltration, and the third one was not

large enough to effectively treat stormwater runoff. Storm sewer upgrades redirected the stormwater into the first pond to allow for treatment. The second pond had the clay layer removed, which allowed for infiltration into the underlying sandy soils that were amended with compost. This pond also had an iron-enhanced sand filter installed to treat dissolved phosphorus. The last pond was reconfigured and enlarged to allow for better pollutant removal. The cost to construct the project was \$113,516, of which the VRWJPO provided cost share of \$59,860 and the Clean Water Fund \$50,000.

- **Scott SWCD Cost-Share Programs** – In 2013, the VRWJPO provided cost share for one raingarden project (\$250) and two filter strips (\$3,299) in the Scott County portion of the watershed.

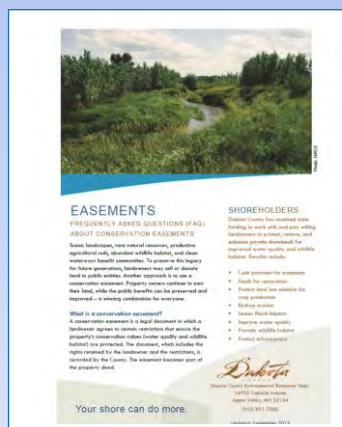
The VRWJPO, City of Lakeville, and Trout Unlimited have been planning shoreland restoration projects on South Creek, which have been carried forward into 2014. The VRWJPO also encumbered CIP dollars to build a demonstration bioreactor on agricultural property in the South Branch subwatershed, but no project locations or cooperators emerged in 2013.



Willing landowners = protected shoreland

Dakota County's Land Conservation Program aims to permanently protect, restore, and enhance lake and riparian shoreline through purchasing conservation easements from willing landowners. The VRWJPO provided staff support to market the concept to landowners along the Vermillion River (as well as other Dakota County water resources).

In 2013, the joint ShoreHolders team sent out packages of information (including maps of approximate easement areas) to 50 landowners in the Vermillion River Watershed, following up with phone contacts and some site visits. These efforts led to commitments of interest from landowners to sell easements on more than 107 acres of shoreland along the Vermillion River main stem, South Creek, and North Creek. The VRWJPO staff will continue marketing ShoreHolders in 2014, as Dakota County has received grants from the Outdoor Heritage Fund and the Minnesota Environment and Natural Resources Trust Fund through 2016.



FEASIBILITY/PRELIMINARY STUDIES

Projects depending upon VRWJPO funds or support often require feasibility or preliminary studies to determine whether they are practical, cost effective, and implementable. The Dakota County and Scott County SWCDs are integral to this effort, providing marketing, technical assistance, and preliminary design consultations to project proposers. In 2013, the VRWJPO focused on the WRAPS investigation. (See the WRAPS category for more information.) Other feasibility studies included:

- ▣ Conceptual stream restoration projects for areas along North and South Creeks in anticipation of working with landowners to acquire conservation easements along the stream corridors. The stream restoration concepts would re-introduce a meandered channel with integrated habitat features into a system that now largely consists of straightened and ditched channels. Collaborators include Dakota County Greenway staff, the DNR, and the City of Farmington.
- ▣ Explored a nutrient- and heat-reduction project with the City of Lakeville at two stormwater ponds located on Cedar Avenue, one on each side of the Vermillion River. An infiltration practice to treat nutrients and infiltrate heated stormwater was studied and found to be infeasible.
- ▣ Met with representatives of Audubon Society to discuss restoration projects on the lower Vermillion River.
- ▣ Worked with the City of Hastings on water quality improvements to the 18th Street Improvement Plan. Tight timeframes and plans in advanced stages of design made suggested changes to benefit water resources impractical.
- ▣ Met with the Farmington School Board about potential participation in ShoreHolders and a wetland restoration. Also discussed possible Vermillion River Watershed wetland bank with the VRWJPB.
- ▣ Met with the City of Lakeville about two potential projects: a nutrient reduction project involving stormwater ponds draining to Lake Marion (see CIP projects for more information) and a potential wetland restoration project.

EVALUATION AND POLICY

The Vermillion River Watershed Plan will be updated in 2015, and the VRWJPB authorized staff to begin that process in 2013. The VRWJPO began with a review of the existing rules for plan preparation, as well as draft rules that BWSR has proposed. Consultations with BWSR led to the conclusion that the VRWJPO will follow the proposed rules and will be advised by BWSR if any other requirements are added during the rules revision process.

The proposed rules focus attention on working closely with citizens and stakeholders on developing the issues, priorities, goals and implementation strategies for the Watershed Plan update. The VRWJPO wants to ensure transparency in forming the plan and took a number of actions in 2013 to build relationships with interested parties. These included:

- Recruiting a team to plan and assist in outreach to stakeholders and the public, including the Dakota County administrator and Scott County co-administrator, VRWJPO staff, planning staff from Dakota County Office of Planning and Analysis (OPA), and members of the WPC and TAG.
- Reviewing a half-way assessment of the existing Watershed Plan to identify implementation tasks that had been completed, tasks that were ongoing, and tasks that had not been addressed.
- Sending a letter to a stakeholder list consisting of approximately 240 individuals or groups – state agencies, cities, townships, agriculture organizations, sports and recreation groups, environmental groups, business organizations, elected representatives and others. The VRWJPO invited stakeholders to identify issues and priorities for the 2015 Watershed Plan update. The VRWJPO received an estimated 100 comments, including detailed comments from the MPCA, MDA, DNR, and BWSR.
- Noticing, advertising, and conducting a Watershed Plan kick-off meeting on October 22, 2013, where another 20-30 comments on issues and priorities were received.
- Requesting the WPC to provide issues and priorities statements.
- Compiling all comments received, organizing comments into issue statements that encompassed the comments, and developing draft issue statements for the Watershed Plan update.

The VRWJPO staff developed plans for continued community and stakeholder engagement, as well as contracting for a regulatory review and analysis (see **Regulatory Review and Regulation**) in 2014. These plans for 2014 include:

- Launching a series of community conversations with people living within the watershed to explain the process, validate and prioritize the issue statements, identify missing issues, and build relationships with local communities. A second round of conversations are planned for summer 2014 to validate goals and develop strategies for working on the watershed's priority issues during the next 10 years.
- Developing a Watershed Plan 2015 page on the VRWJPO website where updated information is available.
- Developing a wiki site that would allow interested parties to comment on the draft Watershed Plan while it is being built.

REGULATORY REVIEW AND REGULATION

In 2013, the VRWJPO continued to implement the Watershed Rules in Eureka Township, issuing five permits for land-disturbing activities and evaluating the necessity for permits in several cases. Other regulatory review and regulation issues that emerged in 2013 include:

- **Contract for a Regulatory Review and Analysis for Watershed Standards and Rules** – The VRWJPB authorized a contract with Emmons & Olivier Resources (EOR) to compare the VRWJPO regulations to those of other comparable watershed management organizations and make recommendations about changes in the Standards or Rules that would be increase efficiency or more effectively

protect and improve watershed resources. Results of the analysis, due in 2014, will influence the Watershed Plan update.

- **Review of Environmental Assessment Worksheet for Flint Hills Resources Facility** – Construction of a paved lot and storage tanks to be used for flammable wastes was reviewed and the VRWJPO commented on whether the facility had sufficient impervious surface in the catchment area in case of a leak or spill.
- **Involvement in Alternative Urban Area-wide Review for UMore** – The VRWJPO was one of many organizations commenting on the AUAR.
- **Hydrologic Model Development and Implementation of Peak Flow Standards** – The VRWJPO completed its hydrologic model and Interagency Technical Review, but communities affected by the peak flow standards requested cost-share assistance for updating local stormwater management models to conform and be consistent with the VRWJPO hydrologic model. The VRWJPO provided cost-share assistance for the Cities of Farmington and Lakeville, which were carried forward into the VRWJPO 2013 Budget.
- **Complaint Response on NPDES Construction Permit Violation** – The VRWJPO staff responded to a complaint about insufficient erosion and sediment control and the CAPX2020 Electrical Substation.
- **Report on Flooding during Intense Rain Event** – The VRWJPO staff inspected flooded properties (two houses and a garage) in Eureka Township and discussed flood insurance and other possible solutions to the occasional flooding during heavy rain.
- **Updated VRWJPO Permitting Criteria** – The VRWJPB approved changes in criteria for erosion and sediment control to ensure that permits are necessary only for situations posing risk to water resources.
- **Formal Request for Site-Specific Standard for Vermillion River** – An ongoing discussion has taken place between the VRWJPO and the MPCA about a site-specific standard for reaches that are neither warm-water nor cold-water, but “cool-water.” The VRWJPO may never be able to meet the standard for cold-water community. The MPCA denied the request, but continues to discuss interim goals with the VRWJPO staff.
- **Plan Review** – Both the VRWJPO and Dakota SWCD reviewed Land Alteration Plans (LAPs) affecting one acre or more, Local Water Management Plans (LWMPs), local ordinances, and other plans affecting the watershed. In 2013, VRWJPO reviewed six plans from local governments and other partners, including large residential developments planned adjacent to tributaries that drain to Middle Creek in Lakeville and a Dakota County road reconstruction project in Eureka Township.

COORDINATION WITH OTHER AGENCIES

In collaboration with other government agencies, the VRWJPO works to eliminate duplication of effort, leverage resources, instill consistency, share knowledge and expertise, and make each public dollar go further in achieving water quality, quantity, and safety goals. Coordination efforts in 2013 included:

- **Assistance with Local Reviews, Oversight, and Coordination with Other Agencies** – The watershed includes all or part of 20 separate jurisdictions, each of which has land-use authority. As local

government units have been implementing Local Water Management Plans, issues have arisen that require consultation. Consultations in 2013 have included discussions with Metropolitan Council Environmental Services on upgrades to the Empire Wastewater Treatment Plant; discussions with Dakota County Parks and the DNR on a planned trail alignment at Schaar's Bluff; support for the Lake Marion-South Creek Regional Greenway plan; consultation on a grant to Dakota County Parks for restoration of native prairie along Spring Lake; and consultation on a grant that would develop a model for farmers to accurately predict irrigation needs.

- ▣ **Serving on Work Groups Considering Local, State, or National Policy Issues** – The political and scientific landscape of water policy is subject to frequent change and reconsideration, and the VRWJPO staff plays a role in these discussions. In 2013, the VRWJPO administrator was invited to participate on the Stormwater Research Council, a newly formed body whose intent is to identify research needs and share research and practice results around stormwater management regionally and at the State level. Paula Liepold, water resources educator, served on a statewide work group on how to incorporate civic engagement into restoration and protection processes, and continues to work with a Dakota County "Measure and Improve" team to integrate greater civic involvement expertise into county programs.

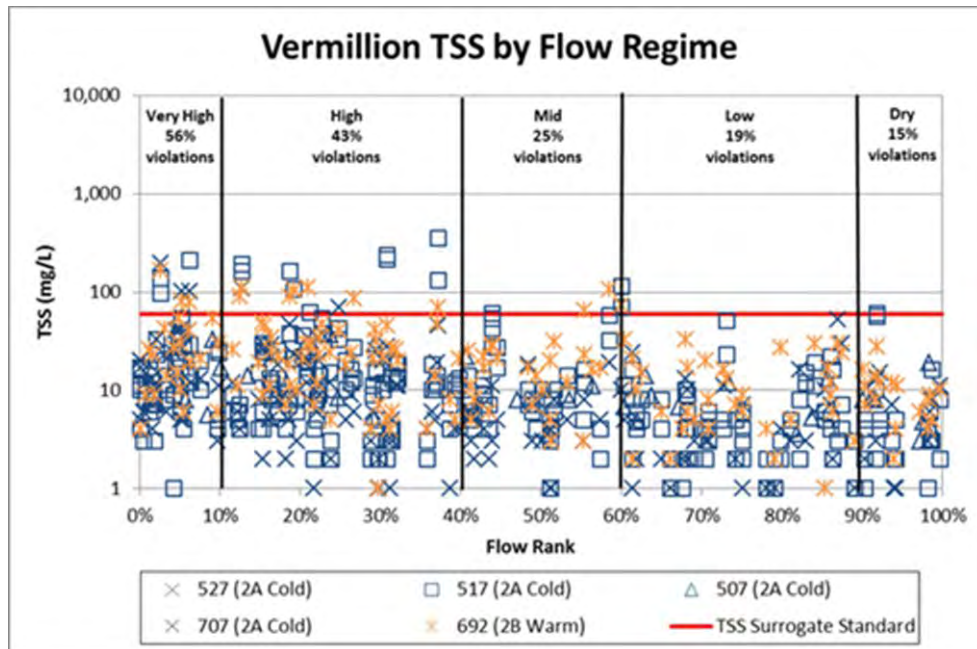
WATERSHED RESTORATION AND PROTECTION STRATEGY (WRAPS)

The VRWJPO, MPCA, and consultant Wenck Associates completed the first phase of the WRAPS investigation in 2013, which was focused on identifying stressors that cause biotic impairments – the lack of proper diversity or quantity of fish and macroinvertebrates. The stressor identification process and refinement of candidate causes were completed. The detailed investigation results are available on the MPCA website, at www.pca.state.mn.us/index.php/water/water-types-and-programs/minnesotas-impaired-waters-and-tmdls/tmdl-projects/lower-mississippi-river-basin-tmdl/project-vermillion-river-watershed-restoration-and-protection-strategy-multiple-imp.html.

The primary stressor in the watershed is **turbidity**. Turbidity along with embedded sediment is the most wide-spread and influencing stressor. Estimates calculated in the study indicate that 9,814 tons per year of sediment from field sources (overland stormwater flow, rather than sediment in stream beds) enter the Vermillion River. The turbidity violations measured are tied to alterations in river flow; 56 percent of the violations of the turbidity standard occurred during high flow situations.

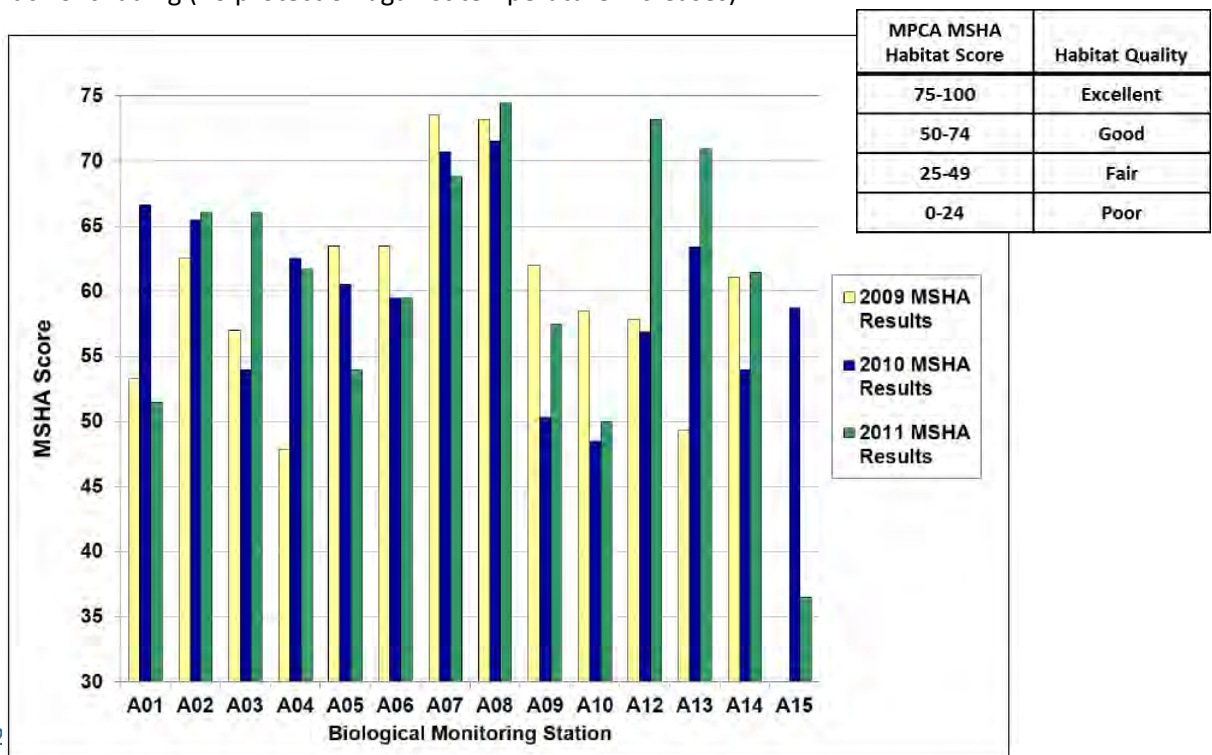
Three secondary stressors identified in Phase I include:

- ▣ Insufficient **dissolved oxygen (DO)** in specific locations in the river and tributaries. Aquatic species need oxygenated water to survive, so are stressed in these locations. Reasons for limited dissolved oxygen include high temperatures during the summer months, organic matter using oxygen up as it decomposes, slow-moving or stagnant water, and (an unexpected result) very high flows. The other secondary stressors are directly linked with DO.



Continuous monitoring of Total Suspended Solids (TSS) at five locations on the river or tributaries shows how frequently turbidity violations occur. During very high river flows, violations were highest.

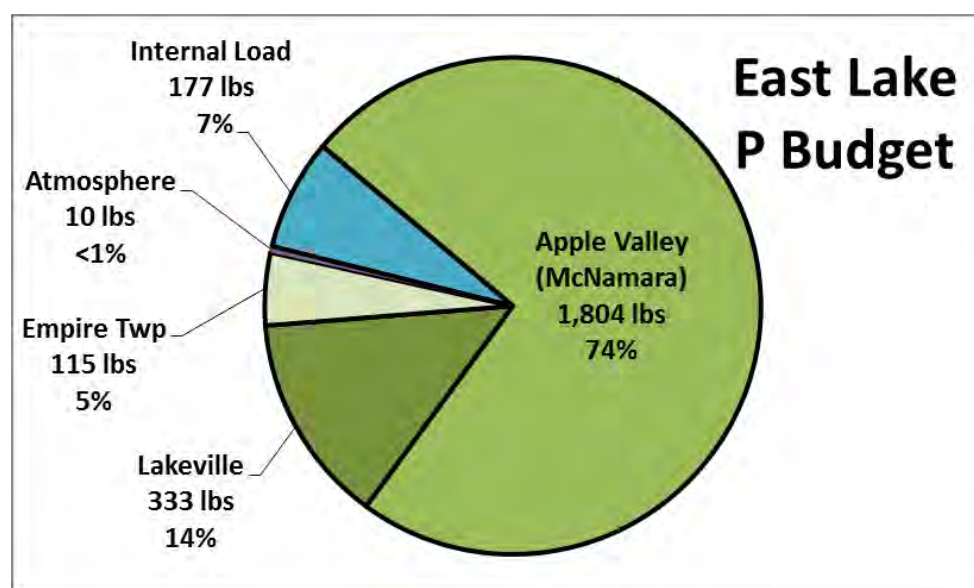
- Increased air **temperature** during summer months increases stream temperatures, and warm water holds less dissolved oxygen. Temperature-sensitive species in cold-water reaches of the Vermillion River system are stressed when water temperature exceeds certain thresholds.
- Altered **habitat conditions** exist intermittently throughout the watershed. Among those alterations that are connected to the prior impairments are channelization (straightening and loss of meanders), loss of riffle/pool sequence (no rocky bottoms or variation in stream depth), lack of buffers (strips along waterways that filter pollutants and prevent sediment runoff), and lack of shading (no protection against temperature increases).



During Phase II, undertaken in 2013, the VRWJPO and MPCA identified causes of bacterial impairments in the river, as well as causes of nutrient impairments in Lake Alimagnet (Apple Valley) and East Lake (Lakeville). In addition, the consultant worked on Total Maximum Daily Load (TMDL) calculations for total suspended solids (TSS, a measure of turbidity) and preliminary allocations.

Source of Bacteria Contributions (H=High, M=Medium)	Flow Regime				
	Very High	High	Mid	Low	Dry
Wastewater Treatment Facilities				M	H
Failing Septics				M	H
Livestock in Receiving Water				M	H
Wildlife in Receiving Water				M	H
Stormwater Runoff (Urban)	H	H	H	H	
Combined Sewer Overflows	H	H	H		
Agricultural Runoff (Rural)	H	H	M		

In March 2014, the VRWJPO presented preliminary information about load allocation to the TAG. The nutrient budgets for Lake Alimagnet and East Lake were discussed in preliminary form.



The MPCA provided funding and consultation for the VRWJPO to conduct civic engagement research, planning, and implementation on a parallel track with the WRAPS investigation. As one of the early watersheds undertaking a watershed-wide TMDL that included all impairments, the MPCA looked for a more strategic approach in engaging citizens in the planning process, developing stewardship values and attitudes that would support efforts to restore impaired waters, and working with communities and networks on WRAPS implementation. A report on civic engagement activities in Appendix V. provides a detailed overview of the process to date.

Among the steps involved with the VRWJPO's civic engagement planning were:

- ▣ Reviewing existing community involvement in watershed programs, including the Wetland Health Evaluation Program, Vermillion Stewards, the Vermillion River Corridor Plan, a University of Minnesota Forestry Resources Department survey of landowner attitudes and values, Mississippi Makeover, existing advisory groups, Children's Water Festival, and others.
- ▣ Coordination of technical and civic engagement activities for the WRAPS to ensure that people reviewing and commenting on the final WRAPS had sufficient context. Many watershed residents know little about current water quality, existing impairments, or potential solutions.
- ▣ Completing a community capacity assessment that included human dimensions data to characterize the watershed's residents. The briefing book provided a detailed description of the impairments and why they mattered, land use and management information, demographics, attitudes and values surveys, existing community networks, and other data to help clarify who would be most responsive and interested in impaired waters restoration activities.
- ▣ Engaging diverse interests in developing a civic engagement plan. The Watershed Engagement Team (WET), a group of selected representatives of community interests and networks, met monthly through the entire year to learn, teach staff, discuss options, and plan strategies. The VRWJPO empowered the WET to make decisions about what would work best in selected focus areas and integrated those decisions into the interim civic engagement plan. The VRWJPO and others will implement civic engagement activities throughout 2014.
- ▣ Reviewing lessons learned and recognizing the efforts of the WET, while continuing in contact with the members in relation to events or initiatives in their communities.



EPA SECTION 319 STREAM COOLING DEMONSTRATIONS

The final project report was completed in September 2013. Demonstrations (as well as screening and site-selection processes) affirmed previous conclusions about the causes of thermal loading, the effectiveness of infiltration/volume reduction BMPs in reducing heat loading, the benefits of shade in mitigating thermal impacts, the limited ability of other mechanical cooling BMPs, and the struggle to find suitable BMPs for some of the watershed's "hot spots." The complete report is on the VRWJPO website (www.vermillionriverwatershed.org), search term "stream cooling."

WETLAND BANKING PROGRAM

Suitable locations for potential wetland restoration projects and banking opportunities emerged as the result of Dakota County SWCD's Restorable Wetland Inventory for the VRWJPO. However, no wetland projects were completed in 2013.

The **Outdoor Heritage Fund**, one of four funds created by the Clean Water, Land and Legacy constitutional Amendment in 2008, receives one-third of the money raised by the sales tax increase. The Lessard-Sams Outdoor Heritage Council was established by the Minnesota Legislature to provide annual funding recommendations for use of the Outdoor Heritage Fund. The council ensures recommendations directly relate to the restoration, protection, and enhancement of wetlands, prairies, forests, and habitat for fish, game, and wildlife.



The **Environment and Natural Resources Trust Fund** was established following voter approval of a constitutional amendment in 1988. The money in the Trust Fund is generated by the Minnesota State Lottery. The Legislative-Citizen Commission on Minnesota Resources recommends how the Trust Fund can be appropriated, "for the public purpose of protection, conservation, preservation, and enhancement of the state's air, water, land, fish, wildlife, and other natural resources."



State Funding Supports VRWJPO Clean Water Projects in 2013

The ShoreHolders shoreline protection, restoration, and enhancement is supported by the Outdoor Heritage Fund and Environmental and Natural Resources Trust Fund. The Watershed Restoration and Protection Strategy (WRAPS) is supported by the Clean Water Fund.

2014 WORK PLAN

The VRWJPO Work Plan and Budget for 2014 maintain core activities: administration, monitoring and data analysis, public outreach and communication, inventory/assessment, feasibility/preliminary studies, evaluation and policy, regulatory review and regulation, consultation with other agencies, and grant-funded activities.

The VRWJPO's highest priorities in 2014 include:

- ❑ Completing Phase 2 of the WRAPS investigation, completing the draft WRAPS plan, and implementing the WRAPS civic engagement plan. Conversations with landowners and other stakeholders about impaired waters in their communities are underway and VRWJPO staff will maintain existing civic engagement programs, attend public events across the watershed, and reach out to individuals, groups, and networks not familiar with the VRWJPO or impaired waters.
- ❑ Integrating the final WRAPS into the 2015 Vermillion River Watershed Plan. The plan will be under development throughout 2014. Stakeholders and the public are actively engaged in setting issues and priorities for the Watershed Plan update. In the process, the VRWJPO has involved agricultural producers, one audience with whom the VRWJPO wanted greater one-on-one contact.
- ❑ Continuing the Biomonitoring Plan to provide current, reliable data on the watershed's existing conditions. Data from the Biomonitoring Plan will be important to the WRAPS, as well as state agencies (DNR and MPCA) deciding whether a site-specific (or possibly interim) standard for fish is appropriate for certain reaches of the Vermillion River currently designated as cold-water streams.
- ❑ Marketing and implementing ShoreHolders, a Dakota County shoreland protection, restoration, and enhancement project to obtain conservation easements from willing landowners with shoreland on the Vermillion River, Cannon River, and other lakes and streams county-wide. Dakota County has received funding from the Outdoor Heritage Fund and the Environment and Natural Resources Trust Fund to support permanent protection and restoration of shorelands.
- ❑ Continuing a special initiative to market nutrient and sediment reduction BMPs in the primarily agricultural South Branch subwatershed, including seeking potential locations for bioreactors to improve water quality discharges from tile lines and ditches.
- ❑ The VRWJPO also seeks wetland restoration projects in the South Branch, following the completion of a restorable wetlands inventory of the South Branch by Dakota SWCD. The VRWJPO will continue exploring the feasibility of a VRWJPO wetland restoration/wetland bank.
- ❑ Increasing prospective CIP projects in the Scott County portion of the watershed, with plans to complete a subwatershed assessment and identify projects for restoration.
- ❑ Continuing to improve public awareness and involvement in the watershed through outreach and communication efforts, including the Wetland Health Evaluation Program (WHEP); Vermillion River Watershed Stewards; Vermillion River Watch; the Fourth Annual Watershed Tour; enhancements to the VRWJPO's website; and community water-quality events.
- ❑ Working with federal, state, regional, and local partners to develop innovative, cost-effective, and comprehensive strategies to maintain and improve the watershed's health and unique natural features.

FINAL 2013 VRWJPO BUDGET AND WORK PLAN

Category	Budget Item	Amount
Administrative	1) Administrator and Specialist	130,000
	2) Scott County Staff Time	8,000
	3) Other Dakota County Staff Time	30,000
	4) Legal Support	25,000
	5) Miscellaneous Expenses (Per Diem, Mileage, Postage)	9,000
	6) Training, Conferences, Certifications	3,000
	7) Office Equipment Purchases	3,000
	Subtotal	208,000
Monitoring and Data Analysis	1) Vermillion River Monitoring Network (Dakota)	
	a) Staff Time (Sampling, Maintenance, Downloading)	31,000
	b) Data Analysis, Database Management, Reporting	16,000
	c) Water Quality Sample Analysis and QA/QC Samples	26,500
	d) Equipment and Supplies	11,000
	2) Vermillion River Monitoring Network (Scott)	13,500
	3) USGS Cost Share for Blaine Avenue Station	8,010
	4) DNR Flow Gaging Assistance	13,090
	5) Biomonitoring Plan	
	a) Biological and Habitat Assessments	13,000
	b) Electrofishing	21,600
	c) Geomorphic Site Evaluation	10,000
	6) South Branch Groundwater Study	3,000
	7) Ambient Groundwater Study (Alternate Years)	31,200
	8) Monitoring Program Review and Evaluation	13,000
	9) Lower Vermillion Turbidity Monitoring	7,000
	Subtotal	217,900
Public Outreach and Education	1) Communication and Outreach Staff	40,000
	2) Wetland Health Evaluation Program Cost Share	3,000
	3) Vermillion River Watch Program	13,000
	4) Vermillion River Stewards	22,000
	5) Scott County Outreach Efforts	4,850
	6) Vermillion River Signage, Map Updates	5,000
	7) Newsletter, Mailings, Web Site, Communication Materials	20,000
	8) Blue Thumb Workshops	25,200
	9) Watershed Partners	5,000
	10) Mississippi Makeover Outreach, Stakeholder Involvement	5,000
	11) Watershed Tour	1,500
	12) South Branch Initiative BMP Marketing	20,000
	13) Building Inspectors Workshop	3,250
	14) South Branch Bioreactor and Wetland Consultant	15,000
	Subtotal	182,800
Inventory Assessment	1) General GIS Support	10,000
	2) Scott SWCD Inventories and GIS Support	750
	3) Scott County Staff	2,000
	Subtotal	12,750

Category	Budget Item	Amount
Capital Improvement Projects	1) Rosemount Cost Share	76,280
	2) Cost Share Programs in Dakota County (SWCD)	147,000
	a) Encumbered 2011 Dakota County Projects (SWCD)	16,200
	3) Cost Share Programs in Scott County (SWCD)	45,100
	a) Encumbered 2011 Scott County Projects (SWCD)	0
	4) Buffer and Floodplain Easements 2011	200,000
	5) Rosemount/Flint Hills Ravine Stabilization Project	172,000
	6) South Creek Restoration Projects	35,000
	7) Apple Valley Phosphorus Reduction Project	40,000
	8) South Branch Bioreactors Cost Share	30,000
Feasibility/Preliminary Studies	9) Hastings 13 th Street Improvement Project	143,000
	Subtotal	904,580
	1) Design of Restoration Projects in South Creek, Headwaters	100,000
	2) Preliminary Design, Tech. Asst, Marketing (Dakota SWCD)	40,000
	3) Preliminary Design, Tech. Asst., Marketing (Scott SWCD)	12,000
	4) Watershed-wide WRAPP	20,000
	5) South Branch Wetland Restoration Design	15,000
	Subtotal	207,000
	1) Dakota SWCD Incentive Program Policy Assistance	4,000
	2) Scott County Staff	2,000
Evaluation and Policy	3) VRWJPO Staff	20,000
	Subtotal	26,000
Regulatory Review and Regulation	1) Dakota SWCD Assistance with Plan Review	20,000
	2) Scott SWCD Assistance with Plan Review	1,550
	3) Implementation of Peak Flow Rate Standards (Local Asst.)	100,000
	a) Peak Flow Rate Standards 2012 Carry Forward	89,100
	4) Engineering Assistance and Review	25,000
	5) Scott County Assistance and Review	2,000
	6) VRWJPO Local Program Assistance	35,000
	7) Regulatory Program Review and Streamlining	25,000
	Subtotal	297,650
Coordination with Other Agencies	1) Coordination Efforts by Scott County SWCD	2,725
Section 319 Stream Cooling Demonstrations	Subtotal	2,725
	1) Grant Coordination, Outreach, Reporting	10,000
	2) Independent Technical Review/Support	4,000
BWSR Clean Water Fund Grant, Rosemount/Flint Hills	Subtotal	14,000
	1) Administration, Management, Coordination, Reporting	12,000
	2) Construction, BMPs, Stabilization	110,000
Vermillion River WRAPP	Subtotal	122,000
	1) Administration, Management, Reporting, Coordination	8,000
	2) Civic Engagement	30,000
	3) Sample Collection, Equipment Installation, Maintenance	5,000
	4) Data Analysis, Database Management, Data Reporting	1,000
	5) Water Quality Analysis and QA/QC Samples	1,000
Total Expenditures	Subtotal	45,000
		2,073,405
Cash Reserve		157,995
TOTAL ANNUAL EXPENSES		2,353,400

2013 FINANCIAL STATEMENT

Dakota County, Minnesota

Statement of Revenues, Expenses, and Changes in Net Assets

Vermillion River Watershed

For the Year Ending December 31, 2013

Revenues	
Dakota County Levy	\$835,041
Scott County Levy	31,743
Interest on Investments	12,164
Permits	4,135
Miscellaneous Revenue	
WRAPP	41,128
Section 319 Stream Cooling Grant	23,685
Rosemount/Flint Hills CWF Grant	217,296
Dakota County Parks	25,000
TOTAL REVENUE	\$1,190,185
Expenditures	
Administrative	\$153,210
Evaluation/Policy Development	7,634
Monitoring/Data Analysis	174,536
Public Outreach/Communication	108,821
Coordination with Other Agencies	0
Regulatory Review/Regulation	27,593
Inventory/Assessment	8,768
Feasibility/Preliminary Studies	28,671
WRAPP	36,394
Section 319 Stream Cooling Grant	6,265
Capital Improvement Projects	331,340
TOTAL EXPENSES	\$883,233
Excess of Revenue Over/Under Expenses	\$306,952
Other Financing Sources	0
Net Change in Fund Balance	\$306,952
Fund Balance January 1, 2013	1,646,232
Fund Balance December 31, 2013	\$1,953,183

Appendix I: Requests for Qualifications, Requests for Proposals



REQUEST FOR PROPOSALS

Vermillion River Watershed Joint Powers Organization Standards' Evaluation

I. GENERAL INFORMATION

A. Purpose of this RFP.

The Vermillion River Watershed Joint Powers Organization (VRWJPO) hereby solicits written proposals for completing an evaluation of its Standards to comparable watershed organizations' standards or rules. The VRWJPO seeks proposals that address all of the requirements outlined in this RFP.

B. Proposal Due Date.

Proposals will be received at:

Physical Development Division
Vermillion River Watershed JPO
ATTN: Travis Thiel
14955 Galaxie Ave.
Apple Valley, MN 55124

Proposals will be received until 4:30 p.m. CST on October 4, 2013.

C. RFP Questions.

All questions regarding this RFP must be submitted by email to Travis Thiel, travis.thiel@co.dakota.mn.us by September 25, 2013.

D. RFP Release.

This RFP was issued September 18, 2013. The VRWJPO reserves the right to amend this RFP at any time.

E. Proposal Costs.

The VRWJPO is not responsible for any costs incurred by the proposer to prepare or submit a proposal, participate in proposer demonstrations or for any other cost to the proposer associated with responding to this RFP.

G. Ownership of Proposals.

All proposals timely submitted become the property of the VRWJPO upon submission, and the proposals will not be returned to the proposers. By submitting a proposal, the proposer agrees that the VRWJPO may copy the proposal for purposes of facilitating the evaluation or to respond to requests for public data. The proposer consents to such copying by submitting a proposal and warrants that such copying will not violate the rights of any third party, including copyrights.

H. Public Records and Requests for Confidentiality.

Pursuant to the Minnesota Government Data Practices Act, Minn. Stat. § 13.591, the names of all entities that submitted a timely proposal to the VRWJPO will be public once the proposals have been opened. All other information contained in the proposals remains private until the VRWJPO has completed negotiating a contract with the selected proposer. After a contract has been negotiated, all information in all of the proposals is public, except “trade secret” information as defined at Minn. Stat. § 13.37.

Requests for release of information held by the VRWJPO are subject to the provisions of the Minnesota Government Data Practices Act, Minn. Stat. ch. 13. Proposers are encouraged to familiarize themselves with these provisions before submitting a proposal.

II. GENERAL CONTRACT REQUIREMENTS

The VRWJPO will require the selected proposer to include the contents of this RFP and all representations, warranties and commitments in the proposal and related correspondence as contractual obligations.

Other contractual requirements will include:

A. Insurance.

Prior to commencement of the contract term the successful proposer shall procure and maintain in full force and effect during the term of the agreement insurance coverage for injuries to persons or damage to property which may arise from or in connection with the performance of work hereunder by the consultant, its agents, representatives, employees or subcontractors. The insurance coverage shall satisfy the requirements set forth in Attachment 1. **A certificate of liability is to be included with the proposal as proof of insurance.** If the selected consultant does not have the insurance coverage as set forth in Attachment 1, a waiver is possible.

B. Standard Assurances.

The selected consultant will be required to comply with the Standard Assurances set forth in Attachment 2.

III. SCOPE OF SERVICES TO BE PROVIDED

The VRWJPO is interested in an evaluation of its Watershed Standards to consider their appropriateness and applicability within the VRWJPO. The VRWJPO is in the early stages of creation for their second generation Watershed Plan, and an evaluation of the existing regulatory framework is warranted. Similar watershed organizations, primarily those with natural resources, issues, and other similarities to the VRWJPO have a regulatory framework that may or may not be similar to the VRWJPO's. The primary desired outcomes of the evaluation are:

- 1) An evaluation of the VRWJPO Standards for any element(s) that are out of date, inappropriate or not applicable, or not relevant for the protection and management of the natural resources within the VRWJPO;
- 2) An investigation of watershed organizations with similar natural resources, issues, etc., with a finalized list of five to seven of the most similar watershed organizations of which a comparison of regulations will be performed. The creation of a matrix comparing the similarities of the selected watershed organizations to the VRWJPO;
- 3) The creation of a matrix that itemizes the existing VRWJPO's Standards and their major elements and compares each of these Standards to the selected watershed organizations' regulations. If a watershed organization has a regulation that the VRWJPO currently does not have and would benefit from it, it should be shown within the matrix separately;
- 4) A report summarizing the results of the comparison and evaluation; and

- 5) A memorandum indicating which regulations should be changed in order to be up to date, which regulations should be changed to be appropriate or applicable, and those regulations that could be changed to be relevant to the protection of the watershed's natural resources.

IV. GENERAL PROPOSAL REQUIREMENTS

A. General Instructions.

1. All proposals by corporations shall bear the official seal of the corporation, if applicable, along with the signature of a duly authorized officer of the corporation.
2. Any changes to the RFP will be made by the VRWJPO through a written addendum. No verbal modifications will be binding.
3. All proposers must submit one electronic copy in PDF format sent via email to Travis Thiel. (travis.thiel@co.dakota.mn.us).
4. Proposals must be no longer than six pages, excluding project personnel resumes. Index the proposal and sequentially number all pages throughout or by section. The proposal should be clear and understandable when reproduced in black and white. All text and exhibits should be succinct and relevant to the RFP requirements.
5. In the case of a variance between written words and figures, the amount(s) stated in written words shall govern.
6. All alterations or erasures must be crossed out and the corrections thereof printed in ink or typewritten adjacent thereto. The corrections must be initialed in ink by each person signing the proposal.
7. The VRWJPO reserves the right to accept or reject any or all proposals, to waive any defects or to advertise for new proposals where the acceptance, rejections, waiving or advertising of such would be in the best interests of the VRWJPO.
8. Proposals received prior to the due date and time will be kept secured and unopened. No proposal received after the due date and time will be considered and will be returned to the proposer unopened.
9. The VRWJPO will not physically release or return to the proposer any proposal for purpose of modification, withdrawal, or any other purpose.
10. All proposals shall be held firm for 90 days from the proposal due date.
11. The VRWJPO is not responsible for locating or securing any information that is not identified as the proposal and reasonably available to the VRWJPO.
12. By submitting a proposal, the consultant represents that he/she has thoroughly examined and become familiar with the work required under this RFP and that he/she is capable of performing quality work to achieve the objectives of the VRWJPO.
13. Any exceptions to the requirements in the RFP must be included in the proposal submitted by the consultant. Segregate such exceptions as a separate element of the proposal under the heading "Exceptions and Deviations".
14. The successful proposer will be required to execute a contract and return it to the VRWJPO within 7 days after the contract forms have been mailed to the successful proposer.

B. General Information

Letter of Submittal and Proposal. Firms must submit both a letter of submittal and a proposal.

The Letter of Submittal shall include:

1. Name, address, phone number, fax number and web address of the firm;
2. Acknowledgement of receipt of RFP addenda, if any;
3. Name, title, address, telephone and fax numbers, and email address (if any) of contact person during period of proposal evaluation;
4. A statement to the effect that the proposal shall remain valid for a period of not less than 120 days from the date of submittal; and

5. Signature of a person authorized to bind the offering firm to the terms of the proposal.

The following information should be provided within the proposal.

1. General Firm Information: List the office location the work will be based out of. Firms receiving the RFP have already provided their firm's qualifications – no further information on the firm needs to be provided.
2. Describe your approach, building on the project scope described in section III above. Specifically address:
 1. The firm's proposed approach for including the participation of VRWJPO staff.
 2. The firm's proposed approach for accomplishing the desired outcomes described in the project scope above.
 3. A detailed project schedule including all formal and informal meetings. Describe the scope and intended objective for all meetings. Also provide hours and associated costs for all meetings.
 4. Any additional issues you believe are significant to the project.
 5. Statement that consultant can meet the timeline presented in IV.C.
3. Key Personnel:

Project Manager: Provide a description of the Project Manager and their qualifications for this project and a brief list of previous projects worked on with the firm that are relevant to this project. Do not only supply a resume of the project manager or key contact persons. If it is possible that more than one project manager will be assigned to various specialty areas, please provide multiple descriptions. No changes in Project Manager and key personnel are allowed after the contract is executed unless approved by the VRWJPO staff.

Key Support Staff: Provide a brief listing of key personnel that will be assigned to this project. Identify their area of expertise and how they have worked with the Project Manager on previous projects.

Previous regulatory framework evaluation experience: Describe previous regulatory framework projects that the Project Manager (s) has managed. Provide no more than a 1 page summary of similar projects.

Sub-consultants: Describe the name and location of other sub-consultants that would be used by the firm in the effort. Identify the approximate percentage of the work that would be performed by each of these firms. Where two or more consultants desire to submit a single proposal in response to RFP, they should do so on a prime-subcontractor basis rather than as a joint venture. The VRWJPO intends to contract with a single firm and not with multiple firms doing business as a joint venture.

Fee Estimate. Provide within the proposal, an increment estimate of the project costs. The fee estimate shall be broken into work tasks with an hourly estimate of time required by each project personnel or sub-consultant. Any allowances for project costs, such as mileage or indirect office costs should be identified. The fee structure will be based on a total cost-not-to-exceed agreement/contract amount including reimbursables.

Contract. The successful consultant will need to include a Statement of Compliance to the terms identified for Standard Assurances and Insurance Terms of the Master Service contract used by the VRWJPO/Dakota County, and will need to have an executed Master Service contract.

Conflict of Interest. The consultant must identify any potential conflict of interest it may have providing the services contemplated by this RFP.

References. Include three (3) references with your submittal that include the name, title, company and phone number of the reference, as well as a short description of the work performed. References should highlight work very similar to what is being asked for within this RFP.

Other information you believe may be valuable in reviewing the qualifications of your firm.

C. Schedule.

This project is expected to take approximately **2 to 3** months, with the following general timeframes and milestones:

1.	RFP distributed to consultants	September 18, 2013
2.	Proposals received by the VRWJPO	October 4, 2013
3.	Consultant selection and contract	October 24, 2013
4.	Project Kick-off	November 1, 2013
4.	Draft Matrix and Report	December 6, 2013
5.	Final Matrix and Report	December 30, 2013

V. PROPOSAL EVALUATION CRITERIA

VRWJPO will identify the consultant firm proposals that most closely meet the needs for the project. Interviews are not anticipated, however, VRWJPO staff may call firms with questions regarding the proposals.

Factors to be considered in making the selection will include but not be limited to the following:

- Project team – qualification and experience of the Project Manager and key staff and sub-consultants proposed to work on the project, experience on previous similar projects, and availability of the key staff members.
- Grasp of project requirements – the firm's analysis, interview preparation and level of interest.
- Project approach/methodology – understanding of VRWJPO goals and objectives and technical needs.
- Responsiveness – compatibility between consultant and the key planning participants, general attitude, ability to communicate with each of the agencies.
- Fee estimate – understanding of the work tasks and appropriately assigning qualified personnel and lowest total project cost.

VI. ATTACHMENTS

Attachment 1: Insurance Terms
Attachment 2: Standard Assurances

Attachment 1

INSURANCE TERMS

Contractor agrees to provide and maintain at all times during the term of this Contract such insurance coverages as are indicated herein and to otherwise comply with the provisions that follow. Such policy(ies) of insurance shall apply to the extent of, but not as a limitation upon or in satisfaction of, the Contract indemnity provisions. The provisions of this section shall also apply to all Subcontractors, Sub-subcontractors, and Independent Contractors engaged by Contractor with respect to this Contract, and Contractor shall be entirely responsible for securing the compliance of all such persons or parties with these provisions.

APPLICABLE SECTIONS ARE CHECKED



1. Workers Compensation. Workers' Compensation insurance in compliance with all applicable statutes including an All States or Universal Endorsement where applicable. Such policy shall include Employer's Liability coverage in an amount no less than \$500,000. If Contractor is not required by Statute to carry Workers' Compensation Insurance, Contractor agrees: (1) to provide County with evidence documenting the specific provision under Minn. Stat. § 176.041 which excludes Contractor from the requirement of obtaining Workers' Compensation Insurance; (2) to provide prior notice to County of any change in Contractor's exemption status under Minn. Stat. § 176.041; and (3) to hold harmless and indemnify County from and against any and all claims and losses brought by Contractor or any subcontractor or other person claiming through Contractor for Workers' Compensation or Employers' Liability benefits for damages arising out of any injury or illness resulting from performance of work under this Contract. If any such change requires Contractor to obtain Workers' Compensation Insurance, Contractor agrees to promptly provide County with evidence of such insurance coverage.



2. General Liability.

"Commercial General Liability Insurance" coverage (Insurance Services Office form title), providing coverage on an "occurrence" rather than on a "claims made" basis, which policy shall include, but not be limited to, coverage for Bodily Injury, Property Damage, Personal Injury, Contractual Liability (applying to this Contract), Independent Contractors, "XC&U" and Products-Completed Operations liability (if applicable). Such coverage may be provided under an equivalent policy form (or forms), so long as such equivalent form (or forms) affords coverage which is at least as broad. An Insurance Services Office "Comprehensive General Liability" policy which includes a Broad Form Endorsement GL 0404 (Insurance Services Office designation) shall be considered to be an acceptable equivalent policy form.

Contractor agrees to maintain at all times during the period of this Contract a total combined general liability policy limit of at least \$1,500,000 per occurrence and aggregate, applying to liability for Bodily Injury, Personal Injury, and Property Damage, which total limit may be satisfied by the limit afforded under its Commercial General Liability policy, or equivalent policy, or by such policy in combination with the limits afforded by an Umbrella or Excess Liability policy (or policies); provided, that the coverage afforded under any such Umbrella or Excess Liability policy is at least as broad as that afforded by the underlying Commercial General Liability policy (or equivalent underlying policy).

Such Commercial General Liability policy and Umbrella or Excess Liability policy (or policies) may provide aggregate limits for some or all of the coverages afforded thereunder, so long as such aggregate limits have not, as of the beginning of the term or at any time during the term, been reduced to less than the total required limits stated above, and further, that the Umbrella or Excess Liability policy provides coverage from the point that such aggregate limits in the underlying Commercial General Liability policy become reduced or exhausted. An Umbrella or Excess Liability policy which "drops down" to respond immediately over reduced underlying limits, or in place of exhausted underlying limits, but subject to a deductible or "retention" amount, shall be acceptable in this regard so long as such deductible or retention for each occurrence does not exceed the amount shown in the provision below.

Contractor's liability insurance coverage may be subject to a deductible, "retention" or "participation" (or other similar provision) requiring the Contractor to remain responsible for a stated amount or percentage of each covered loss; provided, that such deductible, retention or participation amount shall not exceed \$25,000 each occurrence.



Such policy(ies) shall name Dakota County, its officers, employees and agents as Additional Insureds thereunder.

☒ 3. Professional Liability. Professional Liability (errors and omissions) insurance with respect to its professional activities to be performed under this Contract. This amount of insurance shall be at least \$1,500,000 per occurrence and aggregate (if applicable). Coverage under such policy may be subject to a deductible, not to exceed \$25,000 per occurrence. Contractor agrees to maintain such insurance for at least one (1) year from Contract termination.

It is understood that such Professional Liability insurance may be provided on a claims-made basis, and, in such case, that changes in insurers or insurance policy forms could result in the impairment of the liability insurance protection intended for Dakota County hereunder. Contractor therefore agrees that it will not seek or voluntarily accept any such change in its Professional Liability insurance coverage if such impairment of Dakota County's protection could result; and further, that it will exercise its rights under any "Extended Reporting Period" ("tail coverage") or similar policy option if necessary or appropriate to avoid impairment of Dakota County's protection. Contractor further agrees that it will, throughout the one (1) year period of required coverage, immediately: (a) advise Dakota County of any intended or pending change of any Professional Liability insurers or policy forms, and provide Dakota County with all pertinent information that Dakota County may reasonably request to determine compliance with this section; and (b) immediately advise Dakota County of any claims or threats of claims that might reasonably be expected to reduce the amount of such insurance remaining available for the protection of Dakota County.

☒ 4. Automobile Liability. Business Automobile Liability insurance covering liability for Bodily Injury and Property Damage arising out of the ownership, use, maintenance, or operation of all owned, non-owned and hired automobiles and other motor vehicles utilized by Contractor in connection with its performance under this Contract. Such policy shall provide total liability limits for combined Bodily Injury and/or Property Damage in the amount of at least \$1,500,000 per accident, which total limits may be satisfied by the limits afforded under such policy, or by such policy in combination with the limits afforded by an Umbrella or Excess Liability policy(ies); provided, that the coverage afforded under any such Umbrella or Excess Liability policy(ies) shall be at least as broad with respect to such Business Automobile Liability insurance as that afforded by the underlying policy. **Unless included within the scope of Contractor's Commercial General Liability policy, such Business Automobile Liability policy shall also include coverage for motor vehicle liability assumed under this contract.**

☐ Such policy, and, if applicable, such Umbrella or Excess Liability policy(ies), shall include Dakota County, its officers, employees and agents as Additional Insureds thereunder.

☐ 5. Additional Insurance. Dakota County shall, at any time during the period of the Contract, have the right to require that Contractor secure any additional insurance, or additional feature to existing insurance, as Dakota County may reasonably require for the protection of their interests or those of the public. In such event Contractor shall proceed with due diligence to make every good faith effort to promptly comply with such additional requirement(s).

☒ 6. Evidence of Insurance. Contractor shall promptly provide Dakota County with evidence that the insurance coverage required hereunder is in full force and effect prior to commencement of any work. At least 10 days prior to termination of any such coverage, Contractor shall provide Dakota County with evidence that such coverage will be renewed or replaced upon termination with insurance that complies with these provisions. Such evidence of insurance shall be in the form of the Dakota County Certificate of Insurance, or in such other form as Dakota County may reasonably request, and shall contain sufficient information to allow Dakota County to determine whether there is compliance with these provisions. At the request of Dakota County, Contractor shall, in addition to providing such evidence of insurance, promptly furnish Contract Manager with a complete (and if so required, insurer-certified) copy of each insurance policy intended to provide coverage required hereunder. All such policies shall be endorsed to require that the insurer provide at least 30 days' notice to Dakota County prior to the effective date of policy cancellation, nonrenewal, or material adverse change in coverage terms. On the Certificate of Insurance, Contractor's insurance agency shall certify that he/she has Error and Omissions coverage.

☒ 7. Insurer: Policies. All policies of insurance required under this paragraph shall be issued by financially responsible insurers licensed to do business in the State of Minnesota, and all such insurers must be acceptable to Dakota County. Such acceptance by Dakota County shall not be unreasonably withheld or delayed. An insurer with a current A.M. Best Company rating of at least A:VII shall be conclusively deemed to be acceptable. In all other instances, Dakota County shall have 15 business days from the date of receipt of Contractor's evidence of insurance to advise Contractor in writing of any insurer that is not acceptable to Dakota County. If Dakota County does not respond in writing within such 15 day period, Contractor's insurer(s) shall be deemed to be acceptable to Dakota County.

☒ 8. Noncompliance. In the event of the failure of Contractor to maintain such insurance and/or to furnish satisfactory evidence thereof as required herein, Dakota County shall have the right to purchase such insurance on behalf of Contractor, which agrees to provide all necessary and appropriate information therefor and to pay the cost thereof to Dakota County immediately upon presentation of invoice.

☒ 9. Loss Information. At the request of Dakota County, Contractor shall promptly furnish loss information concerning all liability claims brought against Contractor (or any other insured under Contractor's required policies), that may affect the amount of liability insurance available for the benefit and protection of Dakota County under this section. Such loss information shall include such specifics and be in such form as Dakota County may reasonably require.

☒ 10. Release and Waiver. Contractor agrees to rely entirely upon its own property insurance for recovery with respect to any damage, loss or injury to the property interests of Contractor. Contractor hereby releases Dakota County, its officers, employees, agents, and others acting on their behalf, from all claims, and all liability or responsibility to Contractor, and to anyone claiming through or under Contractor, by way of subrogation or otherwise, for any loss of or damage to Contractor's business or property caused by fire or other peril or event, even if such fire or other peril or event was caused in whole or in part by the negligence or other act or omission of Dakota County or other party who is to be released by the terms hereof, or by anyone for whom such party may be responsible.

Contractor agrees to effect such revision of any property insurance policy as may be necessary in order to permit the release and waiver of subrogation agreed to herein. Contractor shall, upon the request of Dakota County, promptly provide a Certificate of Insurance, or other form of evidence as may be reasonably requested by Dakota County, evidencing that the full waiver of subrogation privilege contemplated by this provision is present; and/or, if so requested by Dakota County, Contractor shall provide a full and complete copy of the pertinent property insurance policy(ies).

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K/CM/Exh/Insure-Prof-Liability-
Revised: 10/07

Attachment 2

STANDARD ASSURANCES

1. **NON-DISCRIMINATION**. During the performance of this Contract, the Contractor shall not unlawfully discriminate against any employee or applicant for employment because of race, color, creed, religion, sex, national origin, disability, sexual orientation, age, marital status, veteran's status or public assistance status. The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without unlawful discrimination because of their race, color, creed, religion, sex, national origin, disability, sexual orientation, age, marital status, veteran's status or public assistance status. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices which set forth the provisions of this nondiscrimination clause.

The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, religion, sex, national origin, disability, sexual orientation, age, marital status, veteran's status or public assistance status.

No funds received under this Contract shall be used to provide religious or sectarian training or services.

The Contractor shall comply with any applicable federal or state law regarding non-discrimination. The following list includes, but is not meant to limit, laws which may be applicable:

A. The Equal Employment Opportunity Act of 1972, as amended, 42 U.S.C. § 2000e *et seq.* which prohibits discrimination in employment because of race, color, religion, sex or national origin.

B. Executive Order 11246, as amended, which is incorporated herein by reference, and prohibits discrimination by U.S. Government contractors and subcontractors because of race, color, religion, sex or national origin.

C. The Rehabilitation Act of 1973, as amended, 29 U.S.C. § 701 *et seq.* and 45 C.F.R. 84.3 (J) and (K) implementing Sec. 504 of the Act which prohibits discrimination against qualified handicapped persons in the access to or participation in federally-funded services or employment.

D. The Age Discrimination in Employment Act of 1967, 29 U.S.C. § 621 *et seq.* as amended, and Minn. Stat. § 181.81, which generally prohibit discrimination because of age.

E. The Equal Pay Act of 1963, as amended, 29 U.S.C. § 206(d), which provides that an employer may not discriminate on the basis of sex by paying employees of different sexes differently for the same work.

F. Minn. Stat. Ch. 363A, as amended, which generally prohibits discrimination because of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, disability, sexual orientation or age.

G. Minn. Stat. § 181.59 which prohibits discrimination against any person by reason of race, creed, or color in any state or political subdivision contract for materials, supplies or construction. Violation of this section is a misdemeanor and any second or subsequent violation of these terms may be cause for forfeiture of all sums due under the Contract.

H. Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 through 12213, 47 U.S.C. §§ 225, 611, with regulations at 29 C.F.R. § 1630, which prohibits discrimination against qualified individuals on the basis of a disability in term, condition or privilege of employment.

I. Vietnam Era Veterans' Readjustment Assistance Act of 1974, as amended, 38 U.S.C. 4212, with regulations at 41 C.F.R. Part 60-250, which prohibits discrimination in employment against protected veterans.

2. **DATA PRIVACY**. For purposes of this Contract all data created, collected, received, stored, used, maintained, or disseminated by Contractor in the performance of this Contract is subject to the requirements of the Minnesota Government Data Practices Act, Minn. Stat. Chapter 13 and the Minnesota Rules implementing the Act now in force or hereafter adopted as well as the Federal laws on data privacy, and Contractor must comply with those requirements as if it were a governmental entity. The remedies in section 13.08 apply to the Contractor. Contractor does not have a duty to provide access to public data to the public if the public data are available from the governmental agency (County), except as required by the terms of this Contract. All subcontracts shall contain the same or similar data practices compliance requirements.

3. **HEALTH INSURANCE PORTABILITY & ACCOUNTABILITY ACT OF 1996**. The Contractor agrees to comply with the requirements of the Health Insurance Portability and Accountability Act (HIPAA) which are applicable to the Contractor's duties under this Contract. In performing its obligations under this Contract, Contractor agrees to comply with the

HIPAA Privacy requirements, the HIPAA Standards for Electronic Transactions, the HIPAA security requirements, and any other applicable HIPAA laws, standards and requirements now in effect or hereinafter adopted as they become law.

4. **RECORDS DISCLOSURE/RETENTION.** Contractor's bonds, records, documents, papers, accounting procedures and practices, and other evidences relevant to this Contract are subject to the examination, duplication, transcription and audit by the County and either the Legislative or State Auditor, pursuant to Minn. Stat. § 16C.05, subd. 5. Such evidences are also subject to review by the Comptroller General of the United States, or a duly authorized representative, if federal funds are used for any work under this Contract. The Contractor agrees to maintain such evidences for a period of six (6) years from the date services or payment were last provided or made or longer if any audit in progress requires a longer retention period.

5. **WORKER HEALTH, SAFETY AND TRAINING.** Contractor shall be solely responsible for the health and safety of its employees in connection with the work performed under this Contract. Contractor shall make arrangements to ensure the health and safety of all subcontractors and other persons who may perform work in connection with this Contract. Contractor shall ensure all personnel of Contractor and subcontractors are properly trained and supervised and, when applicable, duly licensed or certified appropriate to the tasks engaged in under this Contract. Each Contractor shall comply with federal, state and local occupational safety and health standards, regulations and rules promulgated pursuant to the Occupational Health and Safety Act which are applicable to the work to be performed by Contractor.

6. **CONTRACTOR DEBARMENT, SUSPENSION AND RESPONSIBILITY CERTIFICATION.** Federal Regulation 45 CFR 92.35 prohibits the State/Agency from purchasing goods or services with federal money from vendors who have been suspended or debarred by the federal government. Similarly, Minnesota Statutes, Section 16C.03, subd. 2 provides the Commissioner of Administration with the authority to debar and suspend vendors who seek to contract with the State/Agency. Vendors may be suspended or debarred when it is determined, through a duly authorized hearing process, that they have abused the public trust in a serious manner.

By Signing This Contract, The Contractor Certifies That It And Its Principals* And Employees:

A. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from transacting business by or with any federal, state or local governmental department or agency; and

B. Have not within a three-year period preceding this Contract: 1) been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (federal, state or local) transaction or contract; 2) violated any federal or state antitrust statutes; or 3) committed embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property; and

C. Are not presently indicted or otherwise criminally or civilly charged by a governmental entity for: 1) commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (federal, state or local) transaction; 2) violating any federal or state antitrust statutes; or 3) committing embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property; and

D. Are not aware of any information and possess no knowledge that any subcontractor(s) that will perform work pursuant to this Contract are in violation of any of the certifications set forth above.

E. Shall immediately give written notice to the Contracting Officer should Contractor come under investigation for allegations of fraud or a criminal offense in connection with obtaining, or performing a public (federal, state or local government) transaction; violating any federal or state antitrust statutes; or committing embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property.

*"Principals" for the purposes of this certification means officers; directors; owners; partners; and persons having primary management or supervisory responsibilities within a business entity (e.g. general manager; plant manager; head of a subsidiary, division, or business segment and similar positions).

Directions for On Line Access to Excluded Providers

To ensure compliance with this regulation, identification of excluded entities and individuals can be found on the Office of Inspector General (OIG) website at <http://oig.hhs.gov/fraud/exclusions/listofexcluded.html>.

K/CM/Exh/SA6-Standard-CM

Appendix II: Vermillion River Monitoring Network 2013 Report Summary

(See www.vermillionriverwatershed.org for the complete report after June 1, 2014.)

2013 Vermillion River Water Quality Monitoring Summary

Monitoring Sites								
Warm (2B)**	Cold (2A)*					South Branch Vermillion R. and Cty. 66 (SB802)		Warm (2B)**
Vermillion R. and Cty. 46 (Scott Co.) (VR24)	South Creek at Flagstaff Ave. (SC806)	Vermillion R. and 220 th St. (VR804)	Vermillion R. and Denmark Ave. (VR807)	North Creek upstream of Middle Creek (NC808)	North Creek downstream of Middle Creek (NC801)			Vermillion R. and Goodwin Ave. (VR803)
Mean Dissolved Oxygen *≥7.0 or **≥5.0 mg/L	9.83	7.93	8.99	9.18	8.72	7.97	9.52	9.65
<i>E. coli</i> Geometric Mean ≤126 or any one sample ≥1260 MPN/100mL	720 (6 exceeds individual standard)	73 (2 exceed individual standard)	188 (3 exceed individual standard)	194 (3 exceed individual standard)	127 (2 exceed individual standard)	221 (4 exceed individual standard)	200 (3 exceed individual standard)	159 (2 exceed individual standard)
Mean Nitrate ≤10 mg/L	0.89	1.41	2.77	2.41	1.17	1.38	6.04	3.41
Mean Un-ionized Ammonia *≤16 or **≤40 µg/L	0.53	0.30	0.49	0.47	0.62	0.81	0.58	0.58
Mean Total Phosphorus ≤0.150 DRAFT mg/L	0.176	0.096	0.112	0.106	0.101	0.161	0.157	0.143
Mean Total Suspended Solids *≤10 or **≤65 DRAFT mg/L	15	26	10	11	10	8	18	19
Mean Summer Temperature *≤18 °C †		11.76	11.23	11.21	11.74	11.68	11.11	
Mean Turbidity *≤10 or **≤25 NTU	6.1	9.1	5.6	5.7	4.1	5.9	9.8	8.0
*applies only to monitoring locations located within 2A waters (SC806, VR804, VR807, NC808, NC801, SB802) **applies only to monitoring locations located within 2B waters (VR24, VR803) State Water Quality Standards, Minnesota Rule 7050.0222 Draft TP standard for Southern Region (including WCBP) (Heiskary et al. 2013) Draft TSS standard for Southern Region (including WCBP) (Markus, 2011) † Trout temperature criteria (Bell, 2006)								

µg/L = micrograms per liter or parts per billion (ppb)
mg/L = milligrams per liter or parts per million (ppm)
MPN = most probable number
°C = degrees Celsius
NTU = nephelometric turbidity unit

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**applies only to monitoring locations located within 2B waters (VR24, VR803)
State Water Quality Standards, Minnesota Rule 7050.0222
Draft TP standard for Southern Region (including WCBP) (Heiskary et al., 2013)
Draft TSS standard for Southern Region (including WCBP) (Markus, 2011)
† Trout temperature criteria (Bell, 2006)

The VRWJPO and Dakota SWCD plan to revise this summary table in subsequent annual summaries to provide greater analysis and context. Among the Vermillion River Monitoring Network coordinator's reservations about this data summary are:

- According to the annual means in the attached table, temperature and dissolved oxygen look fine, although we know from looking at multiple years, continuous data, storm and baseflow conditions, that these parameters are stressors in the Vermillion River and its tributaries.
- Many state standards are complicated. Not all are based on a mean and rely on multiple years of data. Impairment listings require more data and a much more robust analysis.
- This format doesn't include any of the biotic or habitat metrics. Once again, a simple mean would not be an appropriate representation of these data.
- Many parameters change with season, weather, flow condition, and even time of day. There is also a sampling bias; if it happens to be a dry year, the mean looks great. If we were to separate baseflow with storm events (like we do in the full report), we might see a different picture.

Thanks to Jessica Van Der Werff, Dakota SWCD, for this qualifying statement.

Appendix III: Published Communication (Required by Part 8410.0100, Subpart 4)

- ▣ VRWJPO Spring 2013 Newsletter
- ▣ VRWJPO Fall 2013 Newsletter



Spring 2013 Newsletter

Joint Powers Board

Commissioner Paul Krause, Chair
Commissioner Tom Wolf, Vice-Chair
Commissioner Mike Slavik, Treasurer

Meetings are held on the fourth Thursday of each month (except November), 1-3 p.m., at the Dakota County Western Service Center in Apple Valley.

Watershed Planning Commission

- Chuck Clanton, Chair
- Joe Beattie, Vice Chair
- Kyle Andes
- Jackie Dooley
- John Glynn
- Ron Mullenbach
- Andrew Stehr
- Lance Twedt
- Vacant

Meetings are held on the second Wednesday of each month, 4-6 p.m., Dakota County Western Service Center in Apple Valley.

Vermillion River Watershed Staff

- Mark Zabel, Administrator (Dakota Co.)
- Melissa Bokman, Co-administrator (Scott Co.)
- Travis Thiel, Watershed Specialist
- Katherine Carlson, Water Resources Specialist

Vermillion River Watershed Joint Powers Organization

14955 Galaxie Ave.
Apple Valley, MN 55124
952-891-7000

www.vermillionriverwatershed.org

Vegetated filter strips give the river room

A well-established strip of permanent vegetation along a river, stream, wetland, or lakeshore delivers several benefits for water quality and wildlife habitat. The vegetation filters sediments and other pollutants from stormwater runoff, keeping water resources free of turbidity.

Plants in the filter strip use phosphorus and nitrogen for growth, keeping these nutrients out of water resources where they nourish algae blooms. Algae overgrowth contributes to decreases in oxygen levels in the water and unhealthy conditions for fish and other aquatic organisms. The deep roots of native plants hold soils in place, preventing erosion. And vegetation provides food and a place for wildlife to forage, hunt, nest, or escape predators.

Dakota County has undertaken a compliance effort to meet state requirements for 50-foot vegetated filter strips along all Minnesota Department of Natural Resources protected waters. To see examples of completed filter strips, visit www.vermillionriverwatershed.org and search “filter strip.”



Mercury: the invisible water pollutant

The Vermillion River from the Hastings dam to Red Wing has been listed as impaired for mercury accumulation in fish since 1998, as have Lake Marion and Lake Rebecca. In its most recent assessment, the Minnesota Pollution Control Agency (MPCA) found mercury in fish near the City of Farmington. The MPCA proposes to list the Vermillion River between its source in Elko New Market and Hastings as impaired for mercury.

Mercury: the invisible water pollutant, continued

What is mercury and how does it reach rivers and lakes in the watershed?

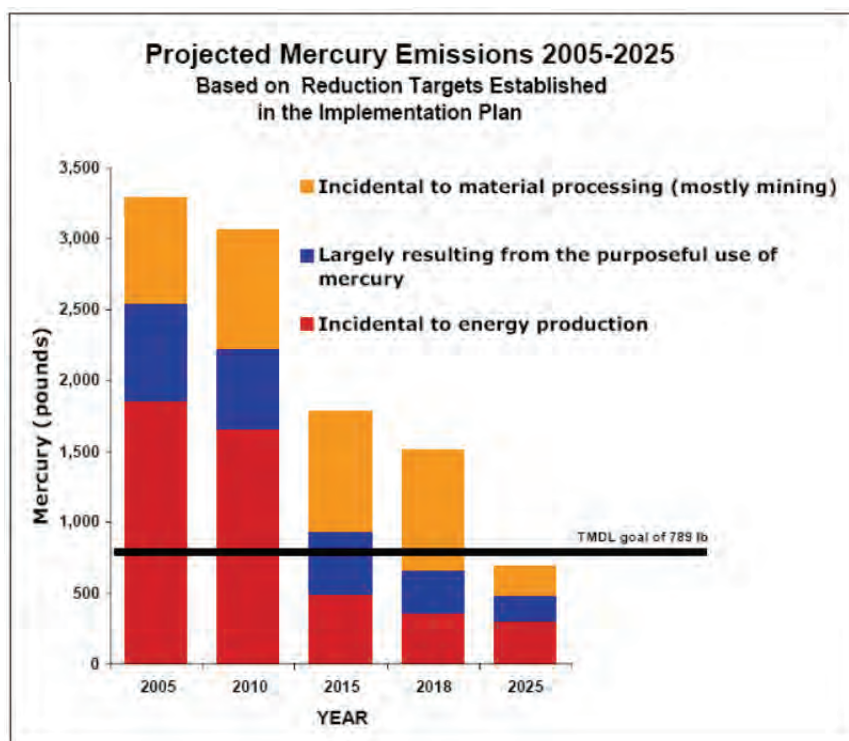
Mercury is an element (abbreviated Hg) found in everyday items such as old thermometers, thermostats, dental filling material, and mechanical switches. Its silvery liquid form is easy to recognize; its airborne vapors are odorless, colorless, and invisible to human perception.

Mercury escapes into the air from coal-burning power plants, taconite production, broken mercury-containing items, and volcanic eruptions. It circulates in the atmosphere, sometimes traveling long distances before falling to earth with precipitation or dust. Eventually mercury ends up in lakes, rivers, or oceans. Once in a lake or stream, bacteria and chemical reactions change the mercury into a toxin known as methylmercury. The human gastrointestinal system absorbs methylmercury, which is toxic to the nervous and immune systems, even in very small quantities.

Fish eat food (plankton and smaller fish) that have absorbed methylmercury. As long as the fish continue to be exposed to mercury, mercury continually builds up in their flesh. Fish that eat other fish become more contaminated. Thus, the fish most desirable for many anglers—the big one that didn't get away—are most affected by mercury contamination.

The Minnesota Department of Health provides advice for people who eat fish taken from the Vermillion River, and those in the Vermillion River Watershed, about what species and number of fish can be consumed safely. Find out more at www.health.state.mn.us/divs/eh/fish/eating/sitespecific.html.

Minnesota's Targets for Reducing Mercury by 2025



What can you do to prevent mercury pollution?

Bring mercury-containing household items to Dakota County's Recycling Zone or your local household hazardous waste collection facility. These items include:

- Fluorescent lamps (both tubes and lightbulbs)
- Old thermometers
- Mercury-containing thermostats and switches

WPC Chair Clanton brings together academia and ‘real world’



Charles J. (Chuck) Clanton brings a wealth of knowledge and experience to his role as chair of the Vermillion River Watershed Planning Commission (WPC). Chuck, who has been a member of the WPC since 2008, is a professor

at the University of Minnesota’s Department of Bioproducts and Biosystems Engineering, a licensed professional engineer and soil scientist, a member of many professional associations, and a farmer and family man with 150 acres in Hampton Township. The Clanton Family Farm demonstrates a range of best management practices for agricultural operations. The VRWJPO asked Commissioner Clanton a few key questions about his civic engagement, agricultural focus, and thoughts about the Vermillion River Watershed’s future.

Why did you decide to serve on the WPC?

One of the risks of being in academia is losing touch with the real world. The WPC has allowed me to represent others in agriculture, explaining how agriculture works and the importance of water quality to agribusiness. At the same time, I learn from listening to others discuss their concerns about water quality. I have been able to use river-related issues as design projects for University of Minnesota environmental and ecological engineering students.

What important issues do you think the watershed will face in the next few years?

One issue I see is defining how clean is “clean” and how good is “good” [in regard to water quality]. I have heard that only drinkable water should be allowed in the river. On the other extreme, [I have heard] that we should not let the river burn or catch fire. The right answer is

somewhere in between. Another issue will be trying to keep all parties with interests that impact the river satisfied and happy.

What role can agricultural producers play in improving water quality and habitat in the watershed?

Agriculture has come a long way in the last century in reducing the amount of sediment, nutrients, and chemicals that enter the river. But more improvements can be made. Producers will need to adopt new technology as it is developed. Tillage practices have drastically changed in the last few decades, almost eliminating primary tillage and moving to conservation and no-till practices. Crop genetics are being changed to adapt to no-till practices with increased insect and disease resistance, increased competitiveness with surface residue, and greater productivity in cooler soils. GPS and GIS have enabled precision agriculture, which allows producers to adjust plant populations; apply very specific amounts of fertilizer as needed by each acre; and apply crop protection products through nozzles that cycle on or off depending on weed or insect density, while avoiding areas such as buffer strips and waterways.

All of this reduces the risk of possible contamination of surface waters. Even with these advances, producers need to be proactive about explaining the methods they choose, especially since more people are removed from production agriculture.

How does the watershed maintain a balance between urban expansion and preserving farmland?

In this region, we are blessed with thriving, growing communities and a vibrant agricultural base with a deep history. To coexist and allow both to succeed, we must continue to communicate and collaborate. The WPC provides one arena for that ongoing dialogue.

Interactive map identifies where groundwater is sensitive to herbicides

A diversified corn and soybean herbicide strategy is important for maintaining effective weed control. However, many herbicides have properties that make them susceptible to leaching. As a result, their labels may contain application restrictions or groundwater advisories based on conditions that are common in the Vermillion River Watershed. The University of Minnesota Extension, Dakota County Office of GIS, and Dakota County Environmental Resources Department have developed a web-based interactive map that identifies areas where groundwater is sensitive to herbicides applied for weed control.

These sensitive areas consist of locations where soils are coarse-textured and groundwater is shallow (less than 30 feet to the water table). Specific herbicides have application restrictions (alachlor and acetochlor), while others contain a groundwater advisory. To find out where groundwater may be sensitive to herbicide application, see the map at www.dakotacounty.us, search "agriculture" and link to "Herbicides and Groundwater." When applying any herbicide, read all application directions and warnings on the label. For more information, contact Phyllis Bongard, U of M Extension, 651-480-7757, or bonga028@umn.edu.

Sign up for watershed on-line newsletter

Sign up to receive the Vermillion River Watershed newsletter in your email instead of in print: go to www.vermillionriverwatershed.org. Click on "Contact Us—Give Feedback" at the bottom of the page. Enter your name, email, and your mailing address. Click "Submit." Or, call 952-891-7000.

When the next issue of the newsletter is available, we will email a link to the newsletter on the Vermillion River Watershed website instead of mailing a printed copy.



Fall 2013 Newsletter

Joint Powers Board

Commissioner Paul Krause, Chair
Commissioner Tom Wolf, Vice-Chair
Commissioner Mike Slavik, Treasurer

Meetings are held on the fourth Thursday of each month (except November), 1-3 p.m., at the Dakota County Western Service Center in Apple Valley.

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- Joe Beattie, Vice Chair
- Jackie Dooley
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Vermillion River Watershed Joint Powers Organization

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Stoffel family honored for conservation

Wally and Bernadette Stoffel and their sons, Greg and Dan, were honored for conservation practices by the Dakota Soil and Water Conservation District. The Stoffels raise corn, soybeans, specialty crops and beef cattle on their farm in Vermillion Township near Hastings. Over the past few years, the Stoffels installed four grass waterways and a 14-acre conservation reserve program (CRP) native planting. They enrolled over 290 acres into the Dakota County Farmland and Natural Areas Program (FNAP), permanently protecting the land from development. Through FNAP, they established a quarter-mile of permanently protected buffer along the Vermillion River. The Stoffels planted over 80 acres of conservation cover crops at their own expense, and are currently working with the University of Minnesota Extension on nitrogen management test plots.



Turbidity is primary cause of Vermillion River impairment

Turbidity is the primary stressor impacting aquatic life and causing the Vermillion River to be impaired for aquatic biota. This means that the fish and macroinvertebrates (mayflies and crawfish) in the river and tributaries are of insufficient quantity and/or type for the Vermillion River to be considered a healthy place for them to live.

Turbidity is cloudiness in the water, typically caused by sediment (dirt and mud). Overland water flow and runoff contribute the most sediment to the river; streambank and near bank erosion are also sources.

Three additional stressors impact aquatic life and contribute to the aquatic biota impairment: lack of dissolved oxygen, high temperatures, and altered habitat. Strategies are being developed, with public input, to gain acceptance for projects and reduce the problems. *Continued on next page.*

Turbidity is primary stressor, continued

The Vermillion River Watershed Joint Powers Organization contracted with the Minnesota Pollution Control Agency and Wenck Associates to determine these stressors. Evaluating the stressors that cause the impairment is one phase of a pollution source analysis and reduction plan called a Watershed Restoration and Protection Strategy (WRAPS).

A second phase of the WRAPS will begin in Fall 2013. This phase will set goals that reduce pollution, address the stressors, allocate responsibility to communities and landowners for meeting those goals, and provide knowledge needed to develop best practices for addressing impairments.



Still time to return well water sample

This summer, Dakota County and the Minnesota Department of Agriculture (MDA) offered free private well water tests for nitrate in targeted townships and cities. Dakota County mailed test kits to private well owners in Castle Rock, Douglas, Hampton, Marshan, Nininger, Randolph, Sciota, Vermillion, and Waterford Townships, plus the cities of Coates, Hampton, Hastings, and Vermillion. If you received a test kit in the mail and would like a free well water test for nitrate, return a water sample by September 30. Instructions for taking the water sample and returning it are included in the kit.

Individual households will receive their own results and the individual results will not be publicized.

Many private wells in Dakota County contain nitrate. Nitrate is the most common source of groundwater contamination in both Dakota County and the United States. Major sources of nitrate contamination can be fertilizers, animal waste, and human sewage. Dakota County highly recommends testing private drinking water supplies annually for nitrate and coliform bacteria.

A water supply with a nitrate concentration of more than 10 milligrams per liter is a significant risk to infants six months of age and younger. Elevated levels of nitrate in water and baby formula prepared from that water can cause Blue Baby Syndrome. Long-term health effects to older children and normally healthy adults are not yet known or agreed upon by scientists. Nitrate can be removed with a reverse-osmosis or distillation treatment system. Boiling water high in nitrate increases its concentration and does not make the water safe to drink.

Private well owners who want to find out how to have their water tested for nitrate can find out more at www.dakotacounty.us and search 'well test'.

The Minnesota Department of Agriculture (MDA) is revamping its 20-year-old Nitrogen Fertilizer Management Plan, and wants to develop better ways to reduce nitrate levels in drinking water aquifers in agricultural areas of Minnesota. Find out more about the state's Nitrogen Fertilizer Management Plan at www.mda.state.mn.us/chemicals/fertilizers/nutrient-mgmt/nitrogenplan.aspx.

Make a splash – as a WPC commissioner

The Vermillion River Watershed Joint Powers Board (VRWJPB) is seeking applicants from rural communities for two vacant seats on the Vermillion River Watershed Planning Commission (WPC). The WPC advises the VRWJPB about water quality and quantity issues, policies, and projects in the watershed. The nine-member commission represents the citizens in communities within the watershed. Commissioners serve a three-year term and attend monthly meetings. Commissioners receive a stipend. To apply for the vacant position, visit the www.vermillionriverwatershed.org and search planning commission or call 952-891-7000.

Generation ‘Next’: VRWJPO begins update of Watershed Plan

The Vermillion River Watershed Joint Powers Organization (VRWJPO) guides watershed management activities according to a 10-year Watershed Plan. The Plan includes goals and objectives, inventories of the watershed’s resources, the VRWJPO’s history and structure, and proposed tasks covering a range of responsibilities. See the current Plan at www.vermillionriverwatershed.org, search “Watershed Plan.”

The current plan was written in 2005. Now it’s time to update the plan for the next 10 years.

The VRWJPO launched the process of updating the Watershed Plan by asking stakeholders – cities, townships, state and federal agencies, advisory groups, environmental organizations, and others – two basic questions. What are the watershed’s most important issues? How should the watershed address those as priorities in 2015-2025?

Stakeholders are sharing their vision for the future of the Vermillion River Watershed through mid-September. Staff will compile issues and priorities from comments received and share at a plan revision kick-off meeting in late October 2013. The VRWJPO also plans more opportunities for stakeholders and citizens to provide input. Look for public notice of the kick-off meeting and help the VRWJPO develop the next generation Watershed Plan. To find out more, contact VRWJPO staff at 952-891-7000.

Atlas 14 precipitation estimates change design standards

In 1963, the U.S. Weather Bureau published Technical Paper 40 (TP40) which set standards for rainfall in storm events used in design of storm water infrastructure, planning, and management. Everything from the sizing of pipes, culverts, ponds, dams, ditches, and estimating flood elevations. This was accomplished by compiling and analyzing rainfall data from the previous 30 years.

Recently the National Oceanographic and Atmospheric Administration (NOAA) reviewed precipitation records again under a similar analysis resulting in the publication of Atlas 14. Atlas 14 and TP40 describe different precipitation estimates in our watershed. An example is the 100-year/ 24 hour storm event. This is a rainfall event of 24 hours duration that is estimated to have a 1% chance frequency of occurrence; or a chance of a return interval of once in 100 years. Based on data for the Farmington area, TP40 estimates 6.0 inches total for that event whereas Atlas 14 estimates 7.41 inches total. A 1.41 inch difference or approximately 25% more rainfall. This is very significant in the design of infrastructure and in estimating the potential impacts of an event.

State agencies and local governments in Minnesota will likely adopt Atlas 14 as the new design standard. This reflects the application of current information in assisting with storm water management and design.



Vermillion River Watershed Joint Powers Organization
14955 Galaxie Ave
Apple Valley, MN 55124

Sign up for watershed on-line newsletter

Receive this newsletter in your email instead of in print: go to www.vermillionriverwatershed.org. Click on "Contact Us—Give Feedback" at the bottom of the page. Enter your name, email, and your mailing address. Click "Submit." Or, call 952-891-7000.

Enjoy the outdoors during these events and improve water quality too!

Contact Friends of the Mississippi River (FMR) at 651-222-2193 x 24 to pre-register for these events:

- **National Public Lands Day Celebration and Clean-up;** Sat., Sept. 28; 9 a.m. to noon; Schaar's Bluff and Lake Rebecca, Hastings (site-to-site bus provided). Help clean up the shores of Lake Rebecca, then enjoy a brief celebration of Vermillion Stewards accomplishments with lunch and refreshments at Schaar's Bluff, known for its stunning river valley views. All are welcome!
- **Seed Collection at the Sand Coulee/Rare Prairie;** Sat., Oct. 12; 9 a.m.-to noon; Sand Coulee Scientific and Natural Area (SNA), Hastings. Known for its 14 rare plant and animal species as well as its blazing fall colors, the Sand Coulee SNA offers a glimpse of what much of Minnesota looked like before European civilization. Enjoy hands-on seed identification and collection training while enjoying this rare example of a sand-gravel prairie. Seed will be used for further habitat restoration. Previous seed collection is not required, all abilities and groups are welcome.
- **Restore Habitat at Pine Bend Bluffs;** Sat., Oct. 26; 9 a.m. to noon (registration closes Oct. 18); Pine Bend Bluffs near Highway 52, Flint Hills property, Rosemount. Enjoy a nice fall workout removing pre-cut buckthorn and performing other restoration tasks in the final Vermillion Stewards event of the year. Volunteers stay warm hauling buckthorn, plus there's hot coffee, a light breakfast, and a hot lunch (in a heated tent). The Pine Bend Bluffs Natural Area along the Mississippi River is one of the largest and most diverse native ecosystems left in the metro area. The site is only accessible to the public for special events such as this.

Appendix IV: Fact Sheets on Capital Improvement Projects 2013

City of Apple Valley

Long Lake Stormwater Retrofit



Project:

Two bioretention cells totaling 8,600 square feet fitted with iron enhanced sand filters were constructed between an existing stormwater pond and Long Lake to create a three step stormwater treatment system. First coarse sediment is removed in the wet pond, then bioinfiltration reduces volume and finally the iron filings in the sand filter removes dissolved phosphorous before the runoff reaches Long Lake.



West Cell



East Cell

Practice:

Bioretention with Iron Enhanced Sand Filter Outlet

Project Benefits:

- Runoff Volume Reduction
- Reduction in Total Suspended Solids and Phosphorus
- Improved Water Quality
- Opportunity for Public Outreach and Education

Partner:

- Vermillion River Watershed Joint Powers Organization
- Minnesota Board of Water and Soil Resources

Watershed:

Vermillion River

Installation:

2012

Funding:

Total Project Cost:	\$136,284
State Clean Water Fund:	\$ 20,000
Vermillion River Watershed JPO	\$ 40,000
City of Apple Valley:	\$ 76,284

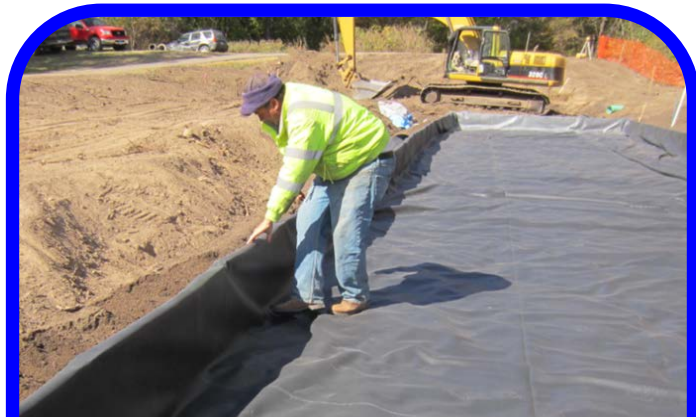
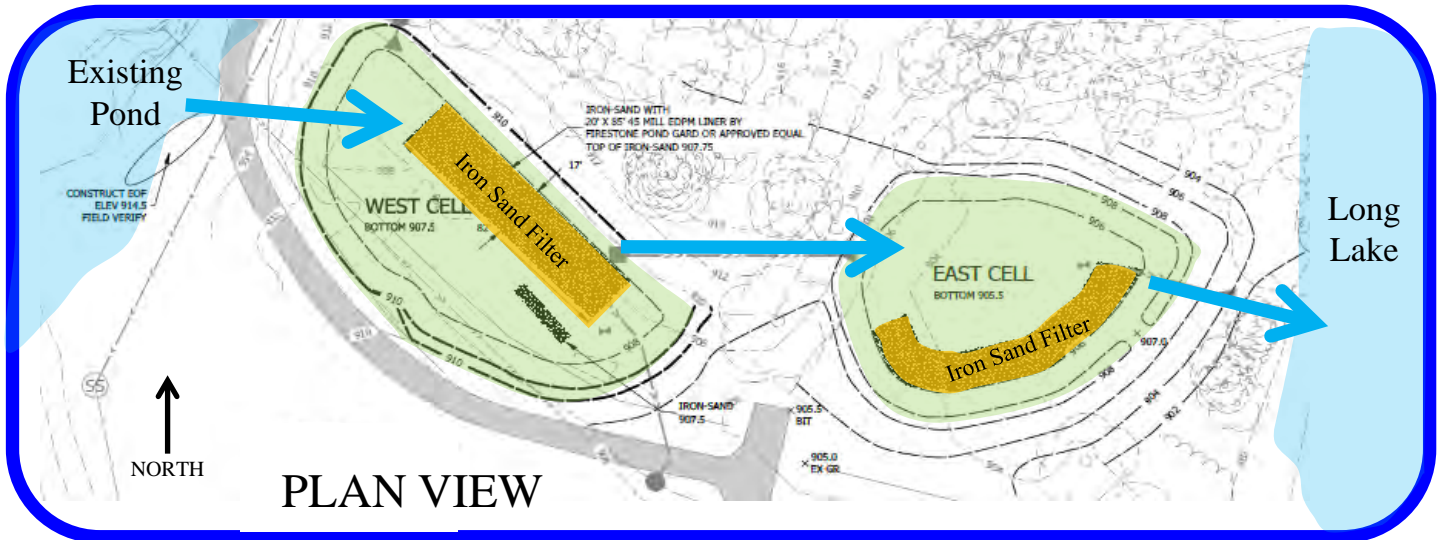
Location:

Apple Valley



*Clean Water Fund:
Protecting and
restoring
Minnesota's waters
for generations to
come.*

City of Apple Valley Long Lake Stormwater Retrofit



After excavating to grade, plywood forms were used to hold the rubber liner which separates the infiltration area from the filtration area.



Perforated underdrains with a flow controlling valve were installed and covered with an 18 inch depth of iron enhanced sand filter material.



The iron sand mixture in the filtration area contained 5% iron filings by weight. The infiltration areas outside of the forms contained 70% coarse washed sand, 15% compost and 15% sphagnum peat.



A native seed mix was covered by erosion control blanket and highlighted with shrub plantings. The cells will remain off-line until 2014 to allow the native seed to establish.

Greg Stoffel

Grassed Waterway and Critical Area Planting



Practice:

Grassed Waterway
Critical Area Planting

Benefits:

Reduced Erosion
and Sediment

Improved Water
Quality

Stabilize Eroding
Gully

Partners:

Minnesota Board of
Water and Soil
Resources

Vermillion River
Watershed Joint
Powers Organization

Natural Resources
Conservation Service

Watershed:

Vermillion River

Construction:

2012 -2013

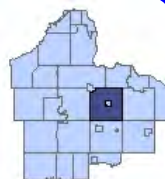
Project: A 400-foot long grassed waterway was re-established and a steep 16-acre hillside was seeded to native vegetation after three 10-foot wide, 3-feet deep and 250-foot long gullies were corrected. The gullies formed after a June 2012 flood event. The landowner placed the hillside into the USDA Conservation Reserve Program (CRP).

Funding:

Total Project Cost	\$5,499
State	\$2,930
Vermillion River Watershed JPO	\$1,194
Landowner	\$1,375

Location:

Vermillion Township
Section 11



*Clean Water Fund:
Protecting and
restoring
Minnesota's
waters for
generations to
come.*

Greg Stoffel

Grassed Waterway and Critical Area Planting



Gully erosion on side-hill.



Re-established grassed waterway, looking north.
Landowner is crimping straw into the soil to stabilize the
channel until grass is established.



Gully erosion on side-hill.



Re-established grassed waterway, looking north, after
straw has been crimped within the channel.



Gully erosion on side-hill.



Re-established waterway after grass emergence.

Ben Boyum Filter Strips



Project:

27.1-acres of filter strips adjacent to the Vermillion River, a Vermillion River tributary stream, and riparian wetlands have been re-enrolled into the USDA's Conservation Reserve Program for 15-years. The filter strip vegetation serves to filter pollutants from upstream runoff before entering the creek, and provide improved nesting cover and wildlife habitat.



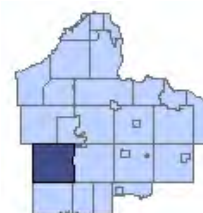
Funding:

27.1 acres of filter strips under 15-year contract:

Federal	\$194/acre/year
State Clean Water Fund	\$ 19/acre/year
Vermillion River Watershed	\$ 18/acre/year

Location:

Eureka Township
Section 18



Practice:

Filter Strips

Benefits:

Reduced Erosion and
Soil Loss
Improved Water Quality
Improved Wildlife
Habitat

Partners:

Vermillion River
Watershed Joint Powers
Organization
Minnesota Board of
Water and Soil
Resources
Natural Resources
Conservation Service

Watershed:

Vermillion River

Installation:

2013



*Clean Water Fund:
Protecting and
restoring
Minnesota's waters
for generations to
come.*

Ben Boyum Filter Strips



Filter strip adjacent to wetland.



Filter strip adjacent to wetland.



Filter strip next to Vermillion River tributary.



Vandenbusch Raingarden

Project:

A bioretention cell totaling 450 square feet to capture and treat runoff from 1.0 acre of street, driveways, roof tops and landscaped areas. The runoff was previously untreated before discharging into Lake Marion.

Practice:

Bioretention

Project Benefits:

Runoff Volume Reduction

Reduction in Total Suspended Solids and Phosphorus

Improved Water Quality

Opportunity for Public Outreach and Education

Partners:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

Construction:

2013

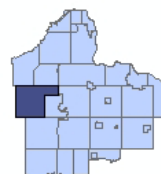


Funding:

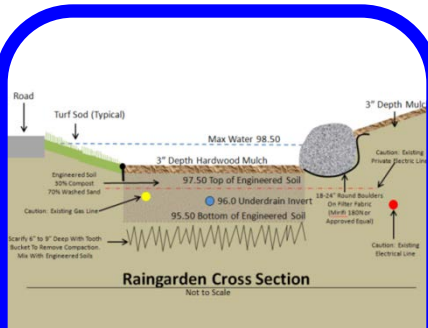
Total Project Cost:	\$10,622
Vermillion River Watershed JPO:	\$ 7,626
Landowner:	\$ 2,996

Location:

Lakeville
Minnesota



Vandenbusch Raingarden



Bioretention cell cross-section



Project area before installation



Installation of boulder retaining wall and wood weir to control outlet elevation



Excavation of bioretention cell with tracked excavator



Loosening of soils at the bottom of bioretention cell prior to engineered soil placement



Installation of underdrain, valve, and engineered soils



Mulch and edging installation



Plant installation



Completed project

Roberts Native Garden



Project: A 150 square foot native garden.

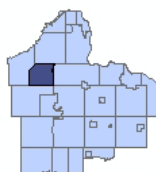
Costs: Project material costs were estimated at \$576.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Location:

Apple Valley
Minnesota



Practice:

Native Garden

Native garden Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public outreach and education

Partner:

Vermillion River
Watershed Joint
Powers
Organization

Watershed:

Vermillion River

Construction:

2013

Reiners Raingarden



Project: A 100 square foot residential raingarden.

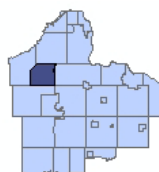
Costs: Project material costs were estimated at \$494.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Location:

Apple Valley
Minnesota



Practice:

Residential
Raingarden

Benefits:

Runoff volume
reduction

Improved
aesthetics

Improved water
quality

Opportunity for
public education
and outreach

Wildlife habitat

Partner:

Vermillion River
Watershed Joint
Powers
Organization

Watershed:

Vermillion River

Construction:

2013

Grotjohn Native Garden



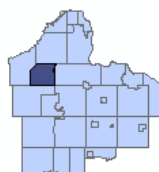
Project: A 550 square foot residential rain garden.

Costs: Project material costs were estimated at \$421.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Location:
Apple Valley
Minnesota



Practice:

Native Garden

Native garden Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public outreach and education

Wildlife Habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

Construction:

2013



Kutschied Raingarden



Project: A 250 square foot residential raingarden.

Costs: Project material costs were estimated at \$1314.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Practice:

Residential Raingarden

Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public education and outreach

Wildlife habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

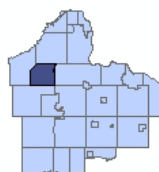
Construction:

2013



Location:

Apple Valley
Minnesota



Dakota County Soil and Water Conservation District

4100 220th St. W., Suite 102, Farmington, MN 55024 651-480-7777 www.dakotaswcd.org

Revised 7/19/2013

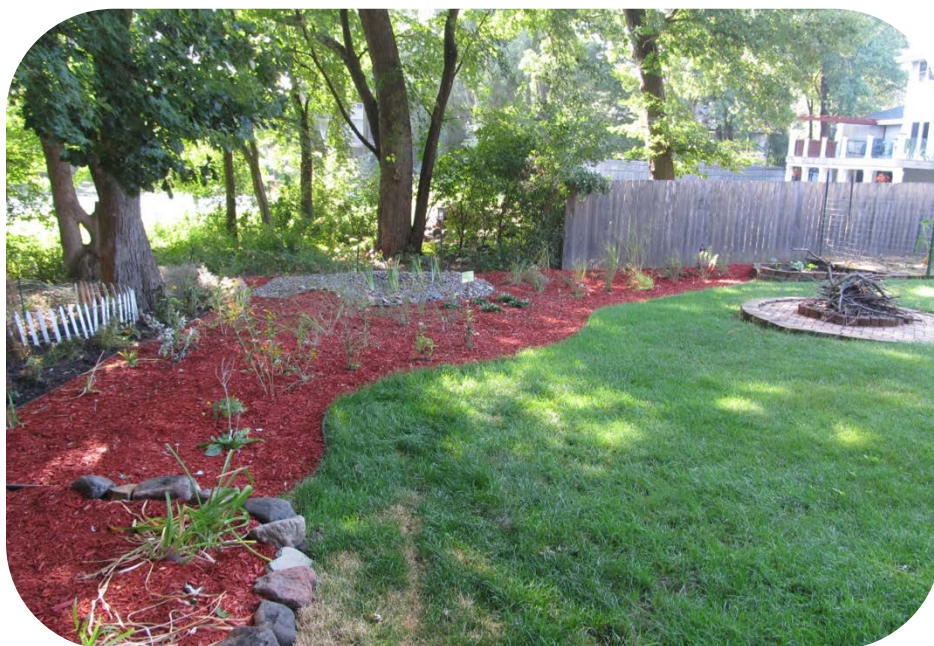
Morical Raingarden



Project: A 385 square foot residential raingarden.

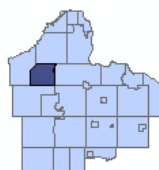
Costs: Project material costs were estimated at \$1833.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Location:

Apple Valley
Minnesota



Practice:

Residential
Raingarden

Benefits:

Runoff volume
reduction

Improved
aesthetics

Improved water
quality

Opportunity for
public education
and outreach

Wildlife habitat

Partner:

Vermillion River
Watershed Joint
Powers
Organization

Watershed:

Vermillion River

Construction:

2013

Young Raingarden



Project: A120 square foot residential raingarden.

Costs: Project material costs were estimated at \$2348.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Practice:

Residential Raingarden

Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public education and outreach

Wildlife habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

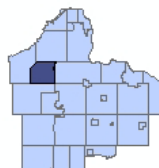
Construction:

2013



Location:

Apple Valley
Minnesota



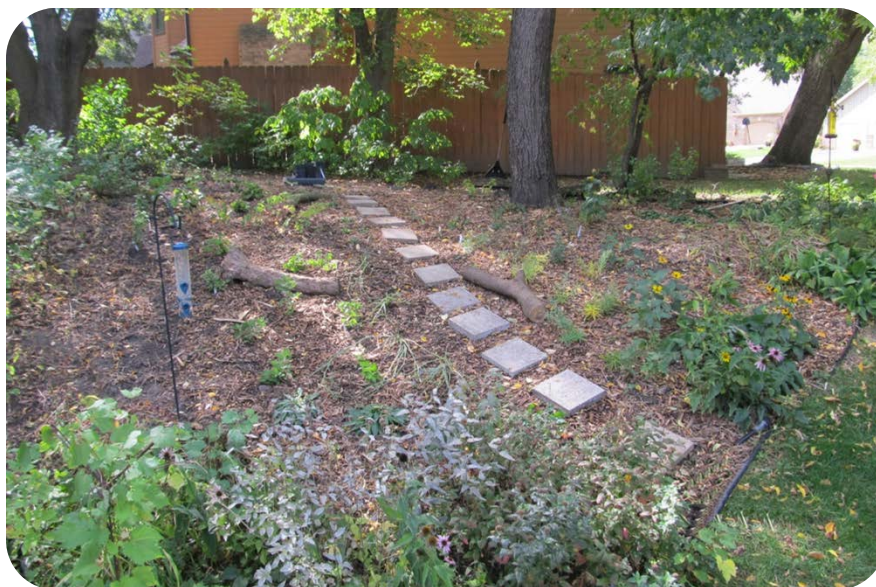
Collins Native Garden



Project: A 250 square foot residential raingarden.

Costs: Project material costs were estimated at \$1295.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Practice:

Native Garden

Native garden Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public outreach and education

Wildlife Habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

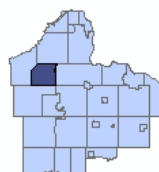
Construction:

2013



Location:

Apple Valley
Minnesota



Dakota County Soil and Water Conservation District

4100 220th St. W., Suite 102, Farmington, MN 55024 651-480-7777 www.dakotaswcd.org

Revised 10/2/2013

Winkels Raingarden



Project: A 180 square foot residential raingarden.

Costs: Project material costs were estimated at \$581.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Practice:

Residential Raingarden

Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public education and outreach

Wildlife habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

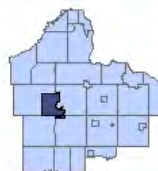
Construction:

2013



Location:

Farmington
Minnesota



Dakota County Soil and Water Conservation District

4100 220th St. W., Suite 102, Farmington, MN 55024 651-480-7777 www.dakotaswcd.org

Revised 7/8/2013

Lewis Raingarden



Project: A 200 square foot residential raingarden.

Costs: Project material costs were estimated at \$928.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Practice:

Residential Raingarden

Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public education and outreach

Wildlife habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

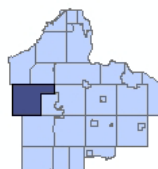
Construction:

2013



Location:

Lakeville
Minnesota



Dakota County Soil and Water Conservation District

4100 220th St. W., Suite 102, Farmington, MN 55024 651-480-7777 www.dakotaswcd.org

Revised 9/3/2013

Steuart Raingarden



Project: A 360 square foot residential raingarden.

Costs: Project material costs were estimated at \$1140.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.

Practice:

Residential Raingarden

Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public education and outreach

Wildlife habitat

Partner:

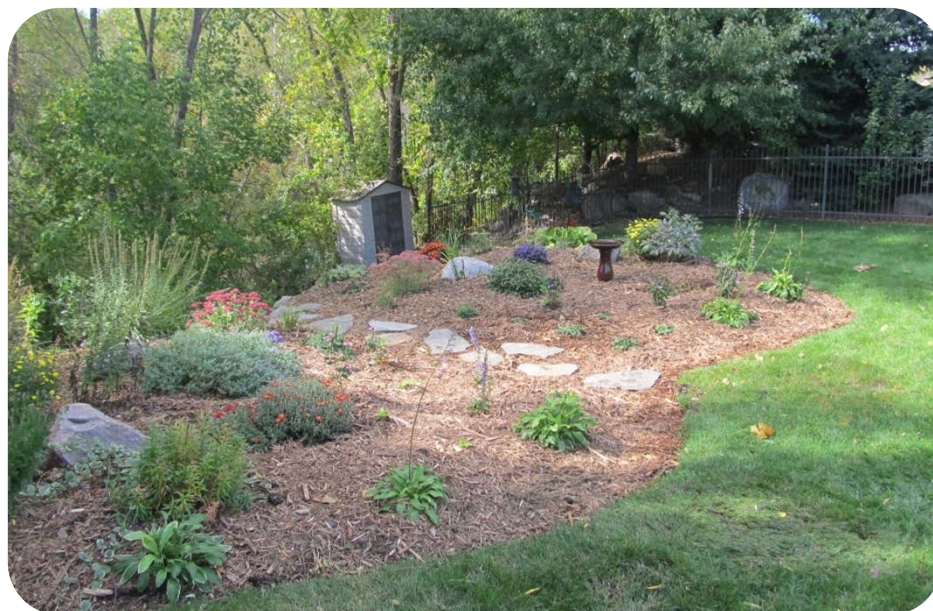
Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

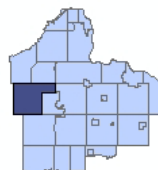
Construction:

2013



Location:

Lakeville
Minnesota



Dakota County Soil and Water Conservation District

4100 220th St. W., Suite 102, Farmington, MN 55024 651-480-7777 www.dakotaswcd.org

Revised 10/4/2013

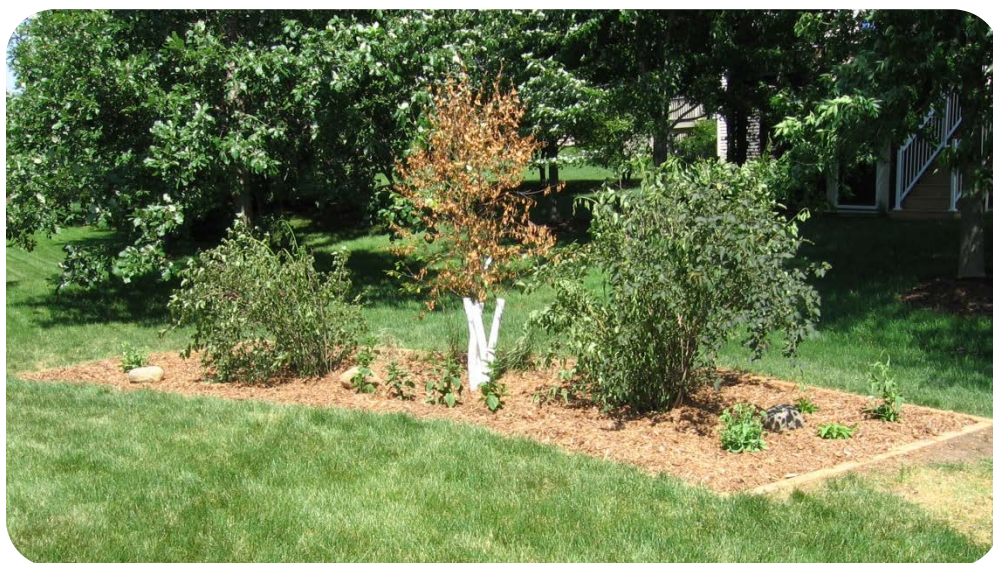
Piehl Raingarden



Project: A 300 square foot residential raingarden.

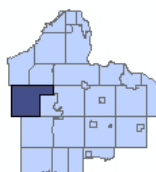
Costs: Project material costs were estimated at \$659.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Location:

Lakeville
Minnesota



Practice:

Residential
Raingarden

Benefits:

Runoff volume
reduction

Improved
aesthetics

Improved water
quality

Opportunity for
public education
and outreach

Wildlife habitat

Partner:

Vermillion River
Watershed Joint
Powers
Organization

Watershed:

Vermillion River

Construction:

2013

Filipa Raingardens



Project: Two residential raingardens totaling 250 square feet.

Costs: Project material costs were estimated at \$952.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Practice:

Residential Raingarden

Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public education and outreach

Wildlife habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

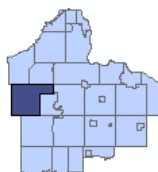
Construction:

2013



Location:

Lakeville
Minnesota



Nelson Native Planting



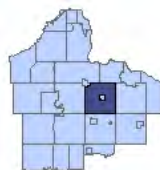
Project: A 500 square foot residential native garden.

Costs: Project material costs were estimated at \$946.

Funding: Dakota County SWCD provided technical assistance and Blue Thumb Grant in the amount of \$250.



Location:
Vermillion Township
Minnesota



Practice:

Native Planting

Native garden Benefits:

Runoff volume reduction

Improved aesthetics

Improved water quality

Opportunity for public outreach and education

Pollinator habitat

Partner:

Vermillion River Watershed Joint Powers Organization

Watershed:

Vermillion River

Construction:

2013

City of Lakeville - Lake Marion South Pond Retrofits



Project: This project retrofits a 73 acre drainage area with the addition of an infiltration basin with pretreatment and enhanced filtration, redirected runoff from 6.2 acres, and modifications to the existing Juno Trail (North) pond. The project will reduce the amount of runoff and associated phosphorus, sediment, and nitrogen that would otherwise enter Lake Marion



Practices:

Stormwater Retrofit
(Infiltration, Enhanced Filtration, Wet Sediment Basin)

Project Benefits:

Runoff volume reduction
Reduction in TSS and Phosphorus
Improved water quality
Opportunity for public outreach and education

Partners:

City of Lakeville
Vermillion River Watershed Joint Powers Organization
Board of Water and Soil Resources

Watershed:

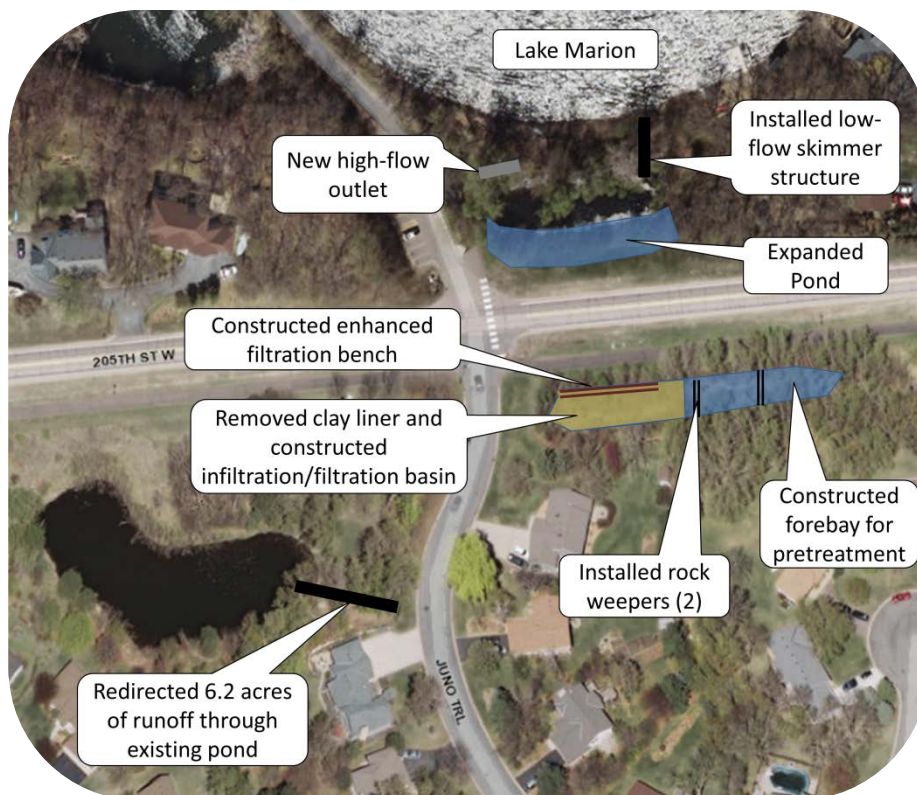
Vermillion River

Construction:

2013



*Clean Water Fund:
Protecting and
restoring
Minnesota's waters
for generations to
come.*

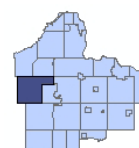


Funding:

Total Project Cost:	\$113,516.32
State Clean Water Fund:	\$ 50,000
Landowner:	\$ 3656.16
Vermillion River Watershed:	\$ 59,860.16

Location:

Lakeville
Minnesota



City of Lakeville - Lake Marion South Pond Retrofits



Installation of pipe to redirect runoff from 6.2 acres into wet sedimentation pond.



Installation of sod and mulch with seed to vegetate soils after installation of pipe.



Installation of rock weepers for pretreatment to remove sediment upstream of infiltration basin



Removal of clay layer to expose underlying sandy soils in the infiltration basin



Installation of iron-enhanced sand filter, engineered soils, and underdrain system



Completed infiltration and enhanced filtration system



North pond after clearing brush



North pond after expansion and reconfiguration of outlet

Appendix V: Civic Engagement Process Report

Civic Engagement Process Report

Watershed Restoration and
Protection Strategy (WRAPS)

Vermillion River Watershed
Dakota and Scott counties, Minnesota

12/31/13





VERMILLION RIVER WATERSHED JOINT POWERS BOARD

- Commissioner Mike Slavik, Chair (Dakota County)
- Commissioner Paul Krause, Vice-Chair (Scott County)
- Commissioner Tom Wolf, Secretary/Treasurer (Dakota County)

VERMILLION RIVER WATERSHED PLANNING COMMISSION

- Chuck Clanton, Chair – Hampton
- Joe Beattie, Vice-Chair – Hastings
- Andrew Stehr – Hampton
- Ron Mullenbach – Lakeville
- Jackie Dooley – Farmington
- John Glynn – Elko New Market
- Lance Twedt – Hastings

PLANNING TEAM

- Paula Liepold, Water Resources Educator, Dakota County Environmental Resources
- Mark Zabel, Administrator, Vermillion River Watershed Joint Powers Organization (VRWJPO)
- Travis Thiel, Watershed Specialist, VRWJPO
- Katherine Carlson, Water Resources Specialist, VRWJPO
- Mary Jackson, Senior Planner, Dakota County Office of Planning and Analysis
- Donna Rae Scheffert, President, Leadership Tools
- Lynne Kolze, Principal State Planner, Minnesota Pollution Control Agency (MPCA)
- Cynthia Hilmoie, Hydrologist 2, MPCA
- Christopher Klucas, Principal State Program Administrator, MPCA

The Vermillion River Watershed is the largest watershed in the Twin Cities Metropolitan Area in Minnesota, encompassing 335 square miles of prairie, farmland, rural communities, rapidly growing suburbs, parks and public spaces, and historical cities.

The Vermillion River emerges in New Market Township in Scott County. From there, the river flows east through central Dakota County to the City of Hastings, where it drops 90 feet and, eventually, joins the Mississippi River. On its way, the Vermillion River collects water from four major tributaries and many minor waterways.

The Vermillion River Watershed Joint Powers Organization (VRWJPO) is leading the development of the Watershed Restoration and Protection Strategy (WRAPS) in cooperation with the Minnesota Pollution Control Agency (MPCA) to identify the sources of stress and impairment to the river and its tributaries, evaluate the feasibility of reaching water quality goals, and allocating pollution-reduction goals to those areas identified as likely pollution sources.

The purpose of the civic engagement plan for this project is to develop and implement a stakeholder process that promotes active involvement in and ownership of the Vermillion River WRAPS development, recommendations, and implementation efforts. Successful implementation of civic engagement encourages local ownership of both water quality problems and solutions. Phase I of the technical study of biotic stressor and pollutant sources began in 2012 and was completed in September 2013. Phase II of the technical study will be completed in 2014.

This interim report on the Vermillion River Watershed WRAPS Civic Engagement Process provides an overview of decisions made by the VRWJPO planning team on how to engage people who live, work, and play in the watershed in its future protection and restoration. It is designed to document the VRWJPO's efforts, lessons learned, and recommendations for other

organizations that will be working on WRAPS in other areas of the state. It will also help refine and improve implementation of the Civic Engagement Plan and the final WRAPS in 2014-15.

WRAPS CIVIC ENGAGEMENT PLANNING TEAM

The VRWJPO, Dakota County, and MPCA staff who assumed responsibility for the WRAPS civic engagement planning brought a variety of job-related experience, education, and training to the process.

The WRAPS-CE team, led by Paula Liepold, Water Resources Educator for Dakota County Environmental Resources, has experience in environmental education; volunteer coordination; outreach; community involvement; event coordination; marketing and public relations; publications management; natural resources planning; survey research; GIS mapping; meeting moderation and training; watershed management; organizational leadership; grant coordination; and other related skills. The planning team made many of the major decisions during the process.

In addition, the team used a common frame of reference. Hans and Annemarie Bleiker, Institute for Participatory Management and Planning, provide widely-recognized training on Citizen Participation for government officials. Most of the WRAPS-CE team, and all VRWJPO staff, took the Bleiker training, which focused on the systematic development of informed consent. To some degree, all of the team members had direct experience working with the public to develop informed consent on complicated or controversial issues, making the Bleiker approach pertinent to watershed management challenges.

However, there is a clear distinction between developing informed consent and finding the spark that will inspire civic ownership and action to protect and restore an entire river system.

MPCA's staff, Lynne Kolze, Senior State Planner, and Cynthia Hilmoie, Hydrologist II, had experience and substantial references on civic engagement. In meetings with the team, they provided case studies, framing concepts, and consultation about the difficult process of unleashing communities' potential to take civic action.

Among the concepts and references that influenced the VRWJPO's civic engagement process: "Strategic Doing: The Art and Practice of Strategic Action in Open Networks," Purdue Center for Regional Development; "Spectrum of Public Participation," International Association for Public Participation; "Social Capital and Our Community," University of Minnesota Extension; "The Art of Focused Conversation" Objective-Reflective-Interpretive-Decisional (ORID), ICA Associates Inc.; "Multilevel Community Capacity Model" and "Capacity Indicators and Categories," University of Minnesota Department of Forest Resources; "Principles for Citizen and Government Collaboration in Public Decision Making," Citizens League; and "Step-by-Step Guide to Conducting a Social Profile for Watershed Planning," University of Illinois Department of Natural Resources and Environmental Sciences.

CIVIC ENGAGEMENT PRIOR TO WRAPS

Well before beginning work on the civic engagement process for the WRAPS, the VRWJPO had established relationships, networks, programs, and partners that provide feedback and disseminate information. Among these pre-WRAPS assets are:

- The Vermillion River **Watershed Planning Commission (WPC)** and **Technical Advisory Group (TAG)**, existing advisory groups that provide a representative public perspective (WPC) and avenue for discussing scientific and technical information (TAG).

- Participation in the development of the **Vermillion River Corridor Plan**, led by Dakota County Land Conservation and Dakota County Office of Planning and Analysis. The planning process involved intensive engagement with the public, specifically landowners along the Vermillion River. This occurred through large public workshops for each of five geographic subsections of the watershed. The process involved conveying problems facing the river, visioning how participants saw the future, and seeking preferred solutions through examples, scenarios, and surveys using Audience Participation Software (APS).
- Partnering with Dr. Mae Davenport and her team from the University of Minnesota, Department of Forest Resources, on a survey of the attitudes and values of shoreline landowners in both the Vermillion River and Sand Creek (Scott County) watersheds. **"Perspectives on Minnesota Water Resources: A Survey of Sand Creek and Vermillion River Watershed Landowners,"** Dr. Davenport's report, provided many interesting and surprising insights on the attitudes and values of landowners.
- The Dakota County Environmental Resource Department works with participating cities on the **Wetland Health Evaluation Program (WHEP)**. Each city selects up to four wetlands to be monitored each season by trained volunteer "citizen scientists." The Minnesota Pollution Control Agency trains volunteer teams on wetland monitoring protocols, as well as macroinvertebrate and plant identification. An estimated 120 WHEP volunteers are recruited each year, many of them volunteering for multiple years.
- **Vermillion River Watershed Stewards Program** is implemented by the Friends of the Mississippi River (FMR) and partially funded by the VRWJPO. Volunteers

participate in hands-on stewardship and educational programs throughout the Vermillion River Watershed. The program provides a great way for watershed residents to actively help protect the Vermillion River.

- Participation and support for civic engagement programs and events of partners, such as the **Mississippi Makeover** (civic engagement process for the Lower Mississippi River turbidity TMDL); **Dakota County Fair; Children's Water Festival; River Watch** (field sampling for high-school students); workshops for public officials; and membership in **WaterShed Partners**.

STATE INTEREST IN CIVIC ENGAGEMENT

The VRWJPO was in early stages of planning WRAPS civic engagement in July 2012 when staff was invited by the MPCA to present at the Clean Water Council, along with staff from the St. Croix Basin, Whitewater River Watershed, and University of Minnesota Extension Center for Community Vitality and Leadership.

The VRWJPO staff discussed the importance of civic engagement in all projects and referenced successful engagement efforts used in the Vermillion Corridor Plan process, Wetland Health Evaluation Program, and Vermillion Stewards. Staff emphasized the value of civic engagement early in program design in building relationships, citizen networks, and trust. It is also

TECHNICAL ADVISORY GROUP EXERCISE: AUDIENCE POWER VERSUS INTEREST GRID

	LOW POWER	HIGH POWER
HIGH INTEREST	<ul style="list-style-type: none"> • Environmental groups (Hastings Environmental Protectors, FMR, Nature Conservancy) • Riparian landowners and landowners with large land holdings in the watershed • Lake associations • Sportsmen's clubs • High-school science teachers and students • Regional wastewater treatment plant staff • Large landowners • Recreational users • Permit applicants and consultants • Businesses located on the river (Bachman's) • Scientists and researchers (USGS) 	<ul style="list-style-type: none"> • VRWJPB and WPC • State and federal agencies (MPCA, DNR, MDA, MCES, USDA), especially those with incentives for agricultural best management practices • County commissioners • City staff (in the bull's eye) • Developers • Public works departments • Property rights organizations • Dakota County Parks and Open Space • Soil and Water Conservation District (SWCD) boards
LOW INTEREST	<ul style="list-style-type: none"> • Renters (apartments and houses) • Churches and religious institutions (Laotian temple) • Industrial facilities • Small lot landowners • Exotic or specialty animal producers • Organic farmers 	<ul style="list-style-type: none"> • Agricultural landowners • City councils • Township boards • State legislators • City parks departments • Commercial property owners • Transportation departments (state and county) • Chambers of Commerce • Renters of agricultural land

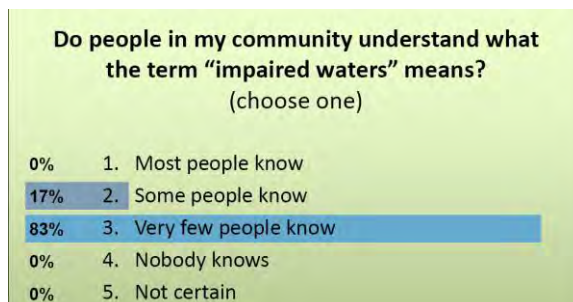
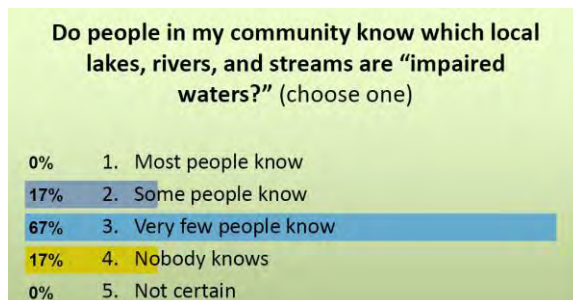
problems that hamper programs designed without public input and ownership.

Paula Liepold was asked to join an interagency state civic engagement steering team to define and discuss civic engagement, policies, and operating principles.

EFFORTS PRIOR TO WRAPS CE PLANNING

The VRWJPO staff meets with Vermillion River Watershed Joint Powers Board (VRWJPB) every month (except November), the citizen advisory Watershed Planning Commission (WPC) monthly, and the Technical Advisory Group (TAG) approximately four times a year. During a meeting of the TAG in November 2011, VRWJPO asked participants (from cities, Dakota and Scott counties, state agencies, and consulting firms) to identify stakeholder groups on a power versus interest grid (power to affect water quality improvement and interest in having water quality improvements occur). The informal exercise helped the VRWJPO to identify stakeholder groups not usually consulted on watershed management issues. The results are shown in the diagram on the previous page.

During this timeframe, the VRWJPO staff also surveyed the Watershed Planning Commission (WPC) to help identify civic engagement problems and priorities. Staff used an Audience Participation System (APS), an add-on to slide presentation software that allows interactive polling through individual radio frequency keypads. The WPC's responses to key questions via APS are included below.





Clearly, WPC members felt that few people in the watershed knew what "impaired" meant and that it was important to provide basic information and engage people on river issues using a wide variety of methods. This preliminary research affected choices that the VRWJPO staff made about how to plan civic engagement activities to support the WRAPS. These major "decision points" are documented and discussed briefly.

DECISION POINT: COORDINATION OF TECHNICAL AND CE PHASES OF THE WRAPS

One of the key decisions made by the staff team was to coordinate the technical and civic engagement phases of the WRAPS at the same time. Phase I of the technical study identified stressors on watershed biota. It was important to familiarize citizens with the problem – impaired waters in the Vermillion River Watershed that do not meet state standards for water quality and biota.

As the WPC survey indicated, few people in the communities represented by the Commissioners understand what the term "impaired waters"

means. Very few people also were perceived as aware that the river reaches within their communities are impaired. Without this context, the VRWJPO would be asking affected stakeholders and citizens to solve problems they did not fully understand and implement solutions in which they played no part.

The VRWJPO decided to plan and implement civic engagement activities during the investigation process and before any sources, solutions, or load allocations were determined. Engaging targeted civic leaders and representatives of civic groups in planning the WRAPS interim and final civic engagement plan was an important feature of the process.

In preparing the WRAPS work plan, the team included a GANTT chart showing the inter-relationships of the civic engagement and technical processes. To implement this braided process, the MPCA and VRWJPO made a commitment to staffing and funding civic engagement elements of the work plan.

Integrating civic engagement and the technical investigation required flexibility and frequent communication with the VRWJPB, advisory groups and, eventually, the Watershed Engagement Team (WET) as Phase I investigation results were coming into the VRWJPO. This allowed these audiences to see the problems and challenges emerge and become defined.

The VRWJPO prepared an impaired waters fact sheet for a general public audience showing the listed impairments. It has been updated several times in less than a year to include new impairments (mercury), pending impairments (potential change in standard for nitrate in surface water), and primary stressors identified in Phase I. (See Attachment A, also available at www.vermillionriverwatershed.org, search term "impaired waters.")

DECISION POINT: NEED FOR COMMUNITY CAPACITY ASSESSMENT

The MPCA and many civic engagement experts focus on the importance of knowing as much as possible about the communities within the watershed before approaching them with problems to be solved. **The VRWJPO team decided to perform a community capacity assessment of communities in the Vermillion River Watershed.** This assessment is documented in the Briefing Book, an evolving tool used to provide the VRWJPB, advisory groups, the WET, and others with a snapshot in time of citizens in the watershed – their lives, work, ages, incomes, housing, values, and attitudes. Steps in developing (and revising) the Briefing Book included:

- Researching existing data and resources for demographics, characteristics, values, beliefs, points of view.
- Considering applicability of attitudes and values data from national, state, or regional surveys.
- Developing maps to understand and visualize the data and provide cues as to where more information might be needed to better assess local areas.
- **Identifying focus areas based upon geographic factors to determine variations in demographics, economics, or values.**
- Documenting analysis of research on community capacity in the Briefing Book.

Compiling this “human dimensions data” was one of the most time-consuming parts of the process. The Watershed Engagement Team added their perspectives and knowledge of the local areas, identifying networks that were not available through standard research methods. The focus area research allows the VRWJPO to help tailor civic engagement strategies to the land use, impairments, and unique features of a more localized area. (See focus areas, next page.)

DECISION POINT: ENGAGING DIVERSE COMMUNITY INTERESTS IN DEVELOPING THE CIVIC ENGAGEMENT PLAN

Consultation with existing advisory/governing bodies (VRWJPB, WPC, TAG) is a routine part of VRWJPO’s process. Members of the board and advisory groups belong to various professional, political, and social networks. Their observations and suggestions continue to be important to civic engagement planning in the watershed.

However, the board and advisory groups have specific and limited roles, and the VRWJPO wanted participation from citizens with specific expertise, leadership skills, influence with a wider range of audiences, track record of civic engagement, and reputations as people who could work collaboratively on shared goals. **With the assistance of advisory groups, the VRWJPO developed a list of names, most drawn from key stakeholder groups or hard-to-reach audience segments.**

To ensure that ideas and suggestions from participants in this civic engagement planning group would be heard, documented, and analyzed, the staff team hired an experienced meeting facilitator to conduct each meeting. Proposals and interviews were solicited with facilitators from the State of Minnesota’s Management Analysis Division, University of Minnesota Extension, and Leadership Tools, a private consulting firm. The VRWJPO staff selected Donna Rae Sheffert, Leadership Tools, to work on the project. She has experience with water-quality-related engagement processes, as well as with groups in the watershed’s general geographic area.

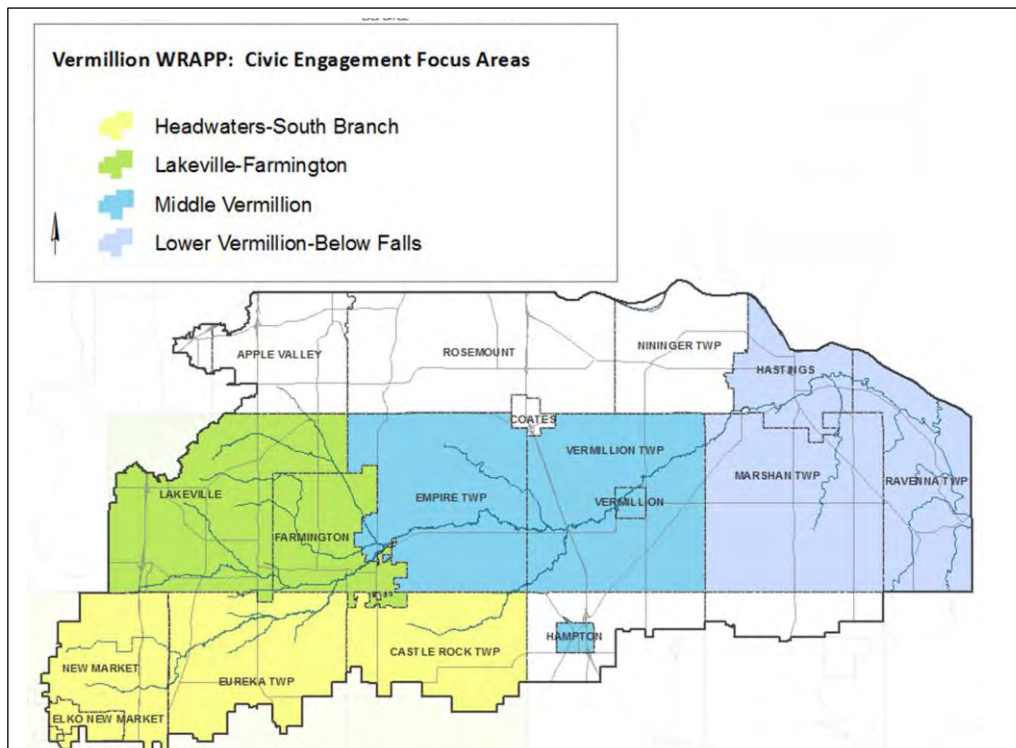
Following consultation with Donna Rae Sheffert, the VRWJPB, and the WPC, staff compiled a list of candidates for the civic engagement steering team. The list included:

- two Hastings high-school students in an advanced biology class;

- lead environmental staff for the City of Lakeville;
- local school superintendent;
- the manager of a large nursery business;
- Farmington gardener, involved citizen, and a member of/liaison to the WPC);
- lead environmental staff for the City of Farmington;
- road maintenance contractor, member of Pheasants Forever and the Dakota County Agricultural Society, resident of Castle Rock Township;
- chair of the Empire Township town board;
- river corridor program director for Friends of the Mississippi River and Vermillion Stewards program coordinator;
- farmer engaged in a farmer-to-farmer outreach project, FarmWise, living outside the watershed;
- City of Apple Valley informal leader involved with habitat restoration in the watershed as a member of Trout Unlimited;
- former township board official in Eureka Township;
- farmer/landowner in the City of Farmington;

- bank manager from City of Hastings;
- planner from the University of Minnesota Center for Urban Affairs from Eureka Township;
- land protection specialist from the Minnesota Land Trust and Wetland Health Evaluation Program (WHEP) team leader;
- president of the Farmington Business Association;
- farmer and township board supervisor from Ravenna Township;
- Vermillion Township officer and farmer; and
- former Watershed Planning Commission member from the City of Elko New Market.

All prospective members were invited, asked to RSVP, and contacted by phone to discuss the WRAPS and the need for civic engagement. Their commitment was limited to a monthly meeting of two hours for one year, unless the group itself decided to continue on its own. Of the 23 people invited, 19 attended the first and second meetings. From there, attrition took place over time, and a core group of approximately 12 people attended regularly.



Members of the civic engagement planning team, re-named the Watershed Engagement Team (WET), were not provided a per diem for their involvement; all of their time and effort was volunteered.

DECISION POINT: DEFINE WET GOALS, ROLES, GUIDING PRINCIPLES, IMPAIRMENTS, AND CONTEXT – THEN EMPOWER THE GROUP

Members of the WET represented many perspectives and opinions, but rapidly became acquainted and worked together well. The VRWJPO decided to focus each meeting on specific objectives. Early meetings focused on explaining the team's role in building civic engagement strategies that would work among their various communities and networks. The members were provided a team charge (Attachment B) and an explanation of civic engagement general principles. Despite frequent discussions of roles, the most frequent questions in the first few meetings were about roles – what did the VRWJPO want the WET to do? Were the members being asked to plan or implement strategies? Were the VRWJPO staff part of the WET or observers, recorders, and consultants? **The VRWJPO wanted to empower the WET to set goals, select strategies, and shape the civic engagement plan.**

The WET was asked to develop a set of guiding principles that would govern how the civic engagement strategies were implemented (Attachment C). The WET took a few meetings to arrive at guiding principles, after analyzing guiding principles established by other organizations.

The Briefing Book was updated at each meeting with information pertinent to the next meeting. The first few meetings included what members of the WET later termed the “data download,” a description of what “impaired” water means and detailed overviews of what impairments exist, why they exist, and why they (and the communities and networks in their areas) should care about the state of the water resources in the watershed.

The impaired waters discussions made the complexity and scope of the problem clear. WET members were generally more aware of the problem of impaired waters than most watershed citizens, but there were issues that were surprising to almost everyone. The

Primary Audiences: Those directly affected by the WRAPS: VRWJPO, VRWJPB, WPC, TAG, Dakota County Environmental Resources, Dakota County Communications Dept., Scott County Natural Resources, SWCDs, MPCA, Wenck Associates, U of M Stout, BWSR, DNR, MDA, MDH, Met Council, Dakota and Scott County Parks/Land Conservation, University of Minnesota Extension, Hastings, Farmington, Lakeville, Apple Valley, Burnsville, Rosemount, Elko New Market, Rural Cities and Townships, and Agricultural Landowners, Homeowners, Renters, Condominium Associations in the Watershed.

Secondary Audiences: Those indirectly affected by the WRAPS: FMR, Vermillion Stewards, Hastings Environmental Protectors, MnRRA, WHEP Volunteers, Southern Dakota County Sportsmen's Club, TU, Pheasants Forever, Other Outdoor Heritage and Wildlife Organizations, Other Watersheds, Master Gardeners, County Parks, City Parks, Recreational Organizations, Dakota County Historical Society, Libraries, Local Building Inspectors, Local Public Water Suppliers, CDAs, Agricultural Organizations, Dakota County Technical College, Educational Institutions, and Agricultural Landowners, Homeowners, Renter, Condo Associations outside of the Watershed.

Tertiary Audiences: Those unaware of the WRAPS or its impacts: 4H, Girl/Boy Scouts, Churches and Religious Institutions, Chambers of Commerce, Business Landowners, UMore, Dakota County Ag Society, Airlake Airport, Lions, VFWs, Panorama of Progress, Rotary Clubs, Knights of Columbus, Eagles, Nonprofits, Senior Organizations, Youth Organizations, News Media, Senior Organizations, Racial/Cultural Minorities.

PRIMARY,
SECONDARY, AND
TERTIARY
AUDIENCES FOR
CIVIC ENGAGEMENT

importance of macroinvertebrates in the watershed ecology, for example, was news to many WET members. Because the impairment discussion took place at the same time as the VRWJPO was receiving early results of the WRAPS Phase I investigation, the WET was getting information “in real time.”

The meeting agendas mixed presentation, discussion, and small-group discussion. At many of the early meetings, VRWJPO provided wall posters showing “What we learned from you” to make certain WET members knew the VRWJPO staff was recording their input and integrating their ideas into the civic engagement plan.

When the WET moved into the community capacity assessment (the human dimensions data), the core group became more engaged in the process. Data about watershed demographics, local differences in water resource assets and challenges, social networks, current civic engagement, and attitudes and values generated enthusiastic conversations.

WET members helped supplement, enhance, and validate the community capacity assessment, selecting strategies to engage the public in each focus area and watershed-wide, identifying key stakeholder/citizen groups, and identifying existing networks and informal community leaders.

Later meetings focused on WET members looking at a series of possible civic engagement strategies. WET gravitated toward many traditional forms for civic engagement, emphasized K-12 education, advocated strongly for face-to-face conversation over electronic or digital communication, and suggested demonstrations of selected best management practices in each of the focus areas.

The WET examined a “gallery” of outreach products about water quality and suggested messages or formats that were suited to the focus areas or specific audience groups.

The WET reviewed the draft Civic Engagement Plan in December and agreed that it reflected their recommendations and discussions. However, they requested additional data compilation and strategy identification for watershed focus areas.

DECISION POINT: CONTINUATION, RECOGNITION

The VRWJPO asked the WET members for a commitment of one year, understanding that involved and interconnected community leaders have complex, time-consuming responsibilities. Members did not want to form an independent, self-sustaining group following their term as WET participants. So many groups and networks exist within the watershed that another organization was not seen as necessary. However, **all participants in the process wanted updates on implementation projects and many were open to organize, host, or help facilitate events, meetings, or projects. This “bridging” function will improve implementation of strategies with networks new to the VRWJPO.**

In the middle of the process, the VRWJPO scheduled a specific meeting to recognize WET members with a “Smoke on the Water” smoked pulled-pork barbecue dinner in between work sessions. The proposed outdoor meeting was August 26, when the National Weather Service issued a heat advisory for the Twin Cities metropolitan area, for “feels like” temperatures in excess of 101 degrees F. The VRWJPO moved the event indoors, and attendance was good. At the final meeting in December, VRWJPO thanked and recognized the WET for its service on behalf of water quality.

LESSONS LEARNED TO DATE

After each WET meeting, VRWJPO staff met to discuss elements of the planning that worked well, what was learned, and what should be done differently next time. Among the lessons learned to date:

- Developing a community capacity assessment – a new process for the VRWJPO staff – takes substantial time and effort. However, the value of the assessment to civic engagement planning was substantial, too. The human dimension data provided detail and depth to portraits of communities in the four focus areas. One difficulty encountered is that census data is not easily obtainable by watershed geography.
- Difficulty in maintaining sufficient attendance at meetings to reflect diverse community opinions. After the first four meetings, attendance waned to approximately 12 consistent members. Attrition over time is likely for any such group, unless it is initiated by the group itself.
- Cohesive and positive relationships among WET members and between WET members and VRWJPO staff were strengthened at each meeting.
- The WET identified networks and informal community leaders that were not known to VRWJPO staff.
- Consensus exists on the difficulty of engaging agricultural audiences; several options to attract attendance were discussed.
- Although staff felt it was important to provide the technical and community capacity background, the most important element that many WET members desired to obtain was to tell them what needs to be done to “fix” the river.
- Confusion among WET members about roles and goals persisted for the first few meetings, so more work up-front to convey and discuss citizen-led processes may have helped. Some members reported that things didn’t “click” for them until the 4th or 5th meeting. Ultimately, the group was high-performing and shaped their role throughout the process.
- By implementing the civic engagement process at the same time as the stressor identification and technical process, information was “hot off the press,” but it

was taxing on staff to adequately prepare the materials for the WET in a timely manner. This also meant that as more was learned throughout the stressor identification/technical process, some of the information provided to the WET had changed.

- A facilitator who was not a member of the VRWJPO staff assisted in meeting design to achieve desired outcomes. The facilitator led each WET meeting, freeing staff of those responsibilities.
- When asked to identify civic engagement strategies, WET members relied on traditional methods (i.e. classroom education), rather than less used methods (i.e. World Café, farmer-led council) – even when they were presented with a menu of civic engagement strategies other organizations have used.
- Rather than defining a civic engagement strategy, WET members thought through logistics and didn’t recommend some because they thought it would be difficult to attract the intended audience.
- Because it was important to have the WET shape, develop, and take ownership of the civic engagement plan, strategies that staff may have preferred or wanted to try were not included in the final plan.

RECOMMENDATIONS FOR ORGANIZATIONS DEVELOPING A WRAPS CIVIC ENGAGEMENT PROCESS

- Stagger the civic engagement and technical process of a WRAPS so that the final or most complete technical information is being integrated into the development of the civic engagement process.
- Depending on the size of stakeholder group recruited for developing civic engagement strategies, focus on inviting more than you anticipate needing, with the expectation that some will not participate throughout the entire process.

- Invite a significant number of stakeholders to participate in the civic engagement process from the interest groups that will be the most difficult to reach and engage. The agricultural community was identified as the most difficult audience to reach and engage in the VRWJPO, and getting their participation in the process was also difficult.
- Identifying the “spark” that triggers people or groups to participate in a process, or make a change, is one of the most important pieces of information needed to target specific interests or networks and move them to action. It makes sense to document each interest, group, or network that the watershed is trying to reach and determine what their “spark” is before developing any strategies for water quality improvement.
- Each civic engagement process will be different. Watersheds are different with regards to their land use, demographics, interest groups, water quality issues, etc. A replicable model of a civic engagement process and strategy development is something that would be extremely difficult, if not impossible to accomplish, although certain tools and lessons learned will benefit others who wish to take on this task.



RECOGNITION
DOOR HANGER
PREPARED FOR WET
MEMBERS