

2024 Annual Report

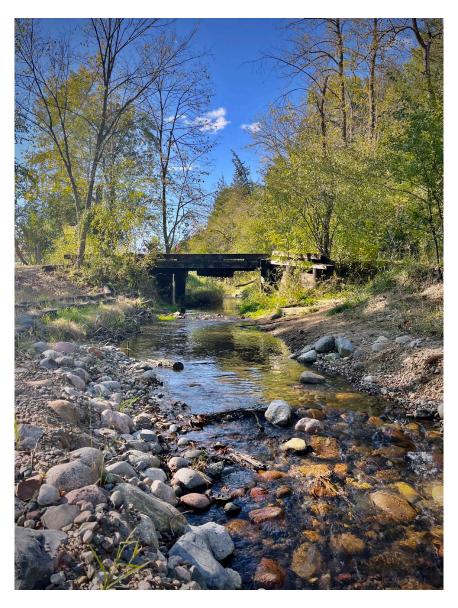


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Board of Managers

Manager	Position	Term Expires	City/County
Mr. Brian Johnson 4353 Dorchester Drive Woodbury, MN 55129 612-710-8585	President	05/01/2025	Woodbury/Washington
Ms. Sharon Doucette 8966 Jasmine Lane South Cottage Grove, MN 55016 651-216-2555	1 st Vice-President	05/01/2026	Cottage Grove/Washington
Ms. Emily Stephens 6638 Jareau Court South Cottage Grove, MN 55016 612-297-9938	2 nd Vice President	05/01/2027	Cottage Grove/Washington
Mr. Kevin ChapdeLaine 601 2 nd Avenue Newport, MN 55055 612-508-1284	Treasurer	05/01/2025	Newport/Washington
Mr. Mike Madigan 2366 Hidden Lake Cove Woodbury, MN 55125 651-702-0488	Secretary	05/01/2026	Woodbury/Washington

Introduction

The Cottage Grove Ravine Watershed Management Organization (WMO) was formed in 1984 to manage the resources of the watershed. This WMO was based on a joint powers agreement among the five cities in the watershed. A draft watershed management plan for the WMO was completed in April 1988; however, this plan was never approved or adopted by the WMO.

The WMO was later disbanded, and, in 1993, the Cottage Grove Ravine Watershed District was formed as the 42nd watershed district in Minnesota. The watershed district changed its name to the South Washington Watershed District (SWWD) in 1995. The SWWD was formed under, and operates in accordance with, Minnesota Statutes, Chapter 103B, "Metropolitan Surface Water Management Act", and Chapter 103D, "Watershed Districts." In 2018, the SWWD celebrated its 25th year Anniversary as the 42nd watershed district in Minnesota. SWWD partnered with Great River Greening in October to host a volunteer planting and anniversary celebration at the SWWD prairie. In December 2018, the SWWD anniversary milestone was recognized at the Minnesota Association of Watershed District Annual Meeting.

The SWWD completed development of the watershed plan in 1996, approval of the plan was granted by the State Board of Water and Soil Resources in 1997, and later amended in 2002. Since that time the SWWD has focused its efforts on determining potential flood risk and developing a comprehensive flood relief system. The proposed system is designed in two phases; 1) reduce potential flood damages for existing developed areas of the watershed; 2) develop a comprehensive solution that provides stormwater management and flood control with capacity for the planned growth included in the 2020 comprehensive land use plans.

In April 2003, the SWWD petitioned the Minnesota Board of Water and Soil Resources to enlarge the boundary and include the East Mississippi Water Management Organization. The East Mississippi Water Management Organization included all or portions of Grey Cloud Island Township, Cottage Grove, Woodbury, St. Paul Park, and Newport. The enlargement was completed as a part of recommendations from the Washington County Water Governance Study (1999). The enlargement petition was approved on May 28, 2003 by the Board of Water and Soil Resources (BWSR). SWWD again petitioned BWSR in May 2010 to enlarge the SWWD boundary and include portions of the dissolved Lower St. Croix Watershed Management Organization (LSCWMO) which included all of Denmark Township and portions of Afton, Cottage Grove and Hastings. BWSR approved the enlargement in September 2010.

SWWD updated the Watershed Management Plan (WMP) through 2007, with BWSR approval in September of 2007, and SWWD Board adoption in November 2007. The updated plan lays out guidance on the management of water and natural resources through the year 2017. The WMP plan was amended in 2010 to include the new Coordinated Capital Improvement Program and three additional capital improvement projects. Another amendment to incorporate areas in its expanded boundary and the priorities and projects identified in the LSCWMO plan was completed in 2011.

In 2016, the SWWD updated the WMP dated 2007, amended in 2010 and 2011. On October 26, 2016, BWSR approved the October 2016 WMP, and the SWWD Board adopted the WMP in November 2016.

This third generation WMP once again builds on past work in the District and is intended to serve SWWD for decades to come. It is structured in three parts.

Part I serves as a summary of various District plans and assessments and points the reader to more regularly updated District data, all of which is available on the District's website, www.swwdmn.org. The website which includes the District's water quality database and web map viewer with extensive spatial data and serves as a repository for District plans and reports. Part II includes identified issues and goals and serves as the basis for all actions that the District takes. Progress toward achieving goals will be routinely assessed and implementation actions adjusted as necessary. Should additional issues be identified by SWWD they will be incorporated through amendment. Part III serves as the District's implementation plan, establishing District programs, Long Range Workplan, and Administrative procedures. This part will be routinely updated through amendment to continue to serve the District.

The WMP complies with Minnesota Rules Chapter 8410, "Metropolitan Area Local Water Management," (July13, 2015), the Metropolitan Surface Water Management Act, and Minnesota Statute 103D.

This report has been prepared in accordance with Minnesota Rules Chapter 8410.0150, Annual Reporting Requirements. Contents of this report pertain to the calendar year 2024.

2024 Financial Report

The 2024 audit report is in Appendix A. Revenue and program expenditure summaries 2024-2025 are presented below.

Revenue

Revenue Source	2024	2025*		
Ad Valorem Levy	\$ 1,500,000	\$ 1,625,000		
Stormwater Utility				
SWWD Area	\$ 2,377,024	\$ 2,470,260		
E. Mississippi	\$ 382,850	\$ 386,500		
Lower St. Croix	\$ 109,400	\$ 111,150		
Total Revenue	\$ 4,369,274	\$ 4,592,910		

^{*}Anticipated Revenue

Program Expenditures

Program Area	2024 Budget	2024	2025 Budget
		Actual/Unaudited	
1.0 Planning	\$ 272,020	\$ 465,494	\$ 427,680
2.0 Regulatory	\$ 47,700	\$ 57,073	\$ 61,700
3.0 Implementation	\$ 5,361,621	\$ 5,983,158	\$ 4,141,484
& Maintenance			
4.0 Education &	\$ 229,830	\$ 196,717	\$ 301,600
Information			
5.0 Operational	\$ 497,128	\$ 474,263	\$ 499,852
6.0 Debt Service	\$ 250,000	\$ 300,260	\$ 100,000
Total Budget	\$6,658,299	\$7,476,965	\$5,532,316

2024 Activity Report

Fund 1-Planning

PURPOSE: TO PROVIDE CURRENT, SOUND GUIDANCE FOR IMPLEMENTATION

Surface Water

- Climate Adaptation and Resiliency Plan. In September 2017, SWWD held a two-day climate adaptation and resiliency plan workshop. The workshops were focused on adaptation and building resiliency into infrastructure and systems. This planning effort is an opportunity for our communities to address risks due to non-climate concerns as well; including poor planning, underdesign, lack of maintenance, etc. Representative from local governments, institutions, and businesses participated in the workshops. The workshops resulted in a plan that identifies vulnerabilities and prioritizes actions to address them (https://www.swwdmn.org/wpcontent/uploads/2018/03/FINAL SWWD-Climate-Resiliency-Plan-3 26 2018.pdf). That completed plan was adopted by the SWWD Board in 2018 and has been incorporated into the Watershed Management Plan as a guidance document. One of the common concerns across cities was a need to coordinate on flood response. In early 2019 SWWD worked with HDR, Inc to update SWWD's flood response and mitigation plan. In 2020, additional efforts will focus on updating operation and maintenance plans for active stormwater controls throughout the primary drainage path running north to south through SWWD including SWWD's central draw storage facility at the Woodbury/Cottage Grove border. In 2020, SWWD was awarded the 2021 Organization Award from the Minnesota Climate Adaptation Partnership for providing local leadership for climate adaptation and resiliency. The award reflects SWWD's accomplishments and ongoing work. SWWD began the process to develop its next 10-year Watershed Management Plan in 2024 an it is expected that the Climate Adaptation and Resiliency Plan will become fully incorporated into the new WMP.
- In 2021, SWWD completed a Newport retrofit analysis that identified targeted BMPs within the City of Newport that will reduce the amount of total suspended solids (TSS) entering the Mississippi River. Construction of an underground TSS BMP at the end of network 4 was completed in 2023. Planning, design, and installation of another underground TSS BMP at the end of Network 3B, a smaller catchment area in Saint Paul Park, was completed in 2024. Future years will see design and implementation of additional TSS BMPs in other priority catchments in these two cities.
- In 2019, SWWD updated its flood response and mitigation plan. That plan identified a need to coordinate system operation between SWWD, Woodbury, and Cottage Grove. Those three agencies continue working to evaluate and operate the interconnected system. In 2023, SWWD and Woodbury completed an effort to further evaluate the Bailey Lift Station, a critical piece of infrastructure for flood protection of southern Woodbury. That effort has identified several improvements to maintain functionality and build resilience. Woodbury will begin implementation of identified improvements in 2024 with \$550,000 in financial support from SWWD's Coordinated Capital Improvement Program.

• In 2021, SWWD and the City of Woodbury agreed to participate in developing an enhanced street sweeping plan. Based on research from University of Minnesota, enhanced street sweeping has been shown to be extremely cost effective at reducing phosphorus loading to water resources in addition to reducing sediment loading and other trash pollution. However, there is often difficulty in getting public works departments to implement enhanced street sweeping programs. By developing an enhanced plan together with the City, SWWD was able to work through those concerns. Following completion of the enhanced street sweeping plan in 2022, SWWD and City of Woodbury entered into an agreement to begin implementing the plan in the fall of 2022. The initial effort was successful, with the City capturing an estimated 75 lbs of TP from their sweeping operations over 1 month. Implementation continued through 2023 (298 lbs TP) and 2024 (287 lbs TP). Efforts will continue indefinitely under an automatically renewing agreement.

Additionally, SWWD has entered into an enhanced sweeping agreement with City of Cottage Grove and assisted the City of St. Paul Park with replacement of their lone mechanical sweeper which was at the end of its useful life.

Natural Resources

- Glacial Valley Interpretative Center. SWWD's Watershed Management plan, identifies the potential and need for a facility (learning center) on the CDSF Prairie site to carry out desired functions of the site. In 2017 SWWD and its partners began work on scoping and designing a future facility and evaluating the need for the facility. A completed schematic design includes parking, regional and interior trail alignments and circulation, a shelter facility with restrooms, informational/interpretive kiosks, and gateway and wayfinding signage/structures. That schematic design has been incorporated into the SWWD Watershed Management Plan as a guidance document. SWWD and its partners will continue pursuing funding opportunities. The SWWD in partnership with Washington County and MNDNR updated the management plan for the prairie to include the conceptual design in early 2020. Planning for the future learning center continues. Hard trail construction was completed in 2024. However, any facility construction is delayed indefinitely pending further road and utility extension by the City of Woodbury.
- In 2017, the SWWD began working with the Washington Conservation District to inventory and prioritize ravines within the Trout Brook subwatershed that have the greatest potential for pollutant load reduction for Trout Brook and the St. Croix River. The completed assessment was adopted as a guidance document to the SWWD Watershed Management Plan. SWWD continues to address priority ravines and seek funding for restoration.

Water Quality Assessment

• SWWD Lake Management Plans. Consistent with the SWWD Watershed Management Plan, SWWD worked with its consultants to review existing SWWD lake management plans. Analysis indicated that SWWD's lakes are seeing more inflow and higher internal loading than previously thought.

SWWD has shifted its retrofit strategies to larger regional BMPs to make larger reductions in watershed loading. SWWD continues to monitor and assess water quality annually.

- In 2021, SWWD began in-lake AIS control efforts on Colby and Ravine Lakes, in consultation with MnDNR. Those efforts expanded in 2023, continued into 2024, and now include Colby, Ravine, Markgrafs, Wilmes, and La Lakes.
- Regional BMP Feasibility. Concurrent with review of SWWD's lake management plans, SWWD, its consultants, and City staff evaluated feasibility of potential regional BMPs in the Armstrong, Wilmes, and Powers Lake watersheds. Several potential BMPs were identified to make large reductions in lake nutrient loading. Those BMPs are in various stages of development and implementation. The Seasons Park stormwater filter was completed and brought online in 2022. The Wilmes Lake Alum Treatment Facility and Hasenbank Stormwater Park were both advanced to final design and began construction in 2023. Both projects are expected to be complete and operational in 2025. In 2024, SWWD and SRF Consulting completed modeling and vetting of possible locations and project concepts as part of a regional feasibility study around Markgrafs Lake to narrow down the best options to reduce phosphorus loading from the lake's 370 acre subwatershed. This effort has resulted in a suite of potential future regional BMP concepts that SWWD can pursue to drive improvements in Markgrafs Lake water quality. The first project is already planned with Woodbury to be incorporated into their 2025 street reconstruction project on the east side of the lake. A similar BMP feasibility study around Colby Lake began in 2024 and is expected to be completed in 2025. These studies will drive a significant portion of planned BMP implementation in SWWD's nextgeneration Watershed Management Plan.
- Armstrong Lake Wetland Monitoring Plan. Armstrong Lake is a shallow waterbody located within the cities of Lake Elmo and Oakdale, Minnesota, within the South Washington Watershed District (SWWD). The lake has excess nutrient input from the watershed and adjacent land uses. The lake is bordered to the west by a large wetland feature: The Armstrong Lake Wetland. Using cattail harvesting within the wetland to reduce nutrient loading into the lake was identified as a practice of interest in both the Armstrong Lake subwatershed retrofit analysis and the northern SWWD stormwater best management practices (BMPs) feasibility study. Barr Engineering has been retained to conduct inlet/outlet water quality, flow, and groundwater monitoring at the wetland to provide baseline data in advance of a future pilot cattail harvesting effort in 2025.

Fund 2-Regulatory

PURPOSE: TO LIMIT THE AFFECTS OF LAND ALTERATIONS AND PROTECT THE PUBLIC HEALTH, WELFARE, AND NATURAL RESOURCES OF THE DISTRICT

Development Reviews

 Development Reviews. SWWD ensures compliance with rate and volume requirements by coordinating development reviews with Municipalities that have adopted a local surface water management plan and updated official controls. Staff conducts full development reviews of projects

- in Municipalities that have yet to adopt their plan or update controls. In Municipalities with an adopted plan and updated controls, SWWD reviews projects for regional impact. SWWD staff provided development review support for several Cities throughout 2024.
- With the State MS4 permit reissued in 2021, SWWD undertook and effort to update District rules.
 Several changes were made to make the rules consistent with various State requirements. The updated rules were adopted in October. SWWD updated its guidance materials to assist Cities with regulatory compliance.
- SWWD monitored potential floodplain impacts from projects as part of its development review process. Multiple projects within the floodplain were reviewed, none of which decreased floodplain storage.
- Multiple projects within the Wilmes Lake watershed were reviewed for potential downstream impact at Wilmes Lake which has exhibited past flooding. No projects reviewed in 2024 are expected to exacerbate existing flooding concerns.
- SWWD maintains extensive hydraulic and hydrologic modeling of the District. Staff continues to
 work with City staff to accommodate incoming development while preserving critical floodplain
 storage in the District as identified in District models.

Wetland Conservation Act

Wetland Conservation Act Administration. In 2012, SWWD became the Local Governmental Unit
(LGU) for wetland permits within the SWWD boundary. In 2024, SWWD reviewed 17 applications.
SWWD staff conducted development reviews to ensure compliance with SWWD wetland standards
and participated as part of the Technical Evaluation Panel (TEP) to evaluate wetland impacts of
proposed projects.

Erosion and Sediment Control

• Erosion and Sediment Control. SWWD standards require projects to meet NPDES requirements for erosion and sediment control. SWWD's Stormwater Pollution Prevention Plan (SWPPP) calls for SWWD to complete up to four inspection annually on active construction sites. Additionally, SWWD rules require Municipalities to identify an inspector and conduct regular inspections. In 2023, SWWD contracted with the Washington Conservation District to help provide inspection services for the Wilmes and Hasenbank projects in Woodbury. These inspection services were continued in 2024 as projects progressed. SWWD works with City staff to enforce compliance on issues identified in inspections.

Fund 3-Implementation and Maintenance

PURPOSE: TO PROVIDE INFORMATION NECESSARY TO ASSESS STATE OF DISTRICT RESOURCES AND IMPACT OF DISTRICT ACTIONS

Monitoring

• SWWD continued to operate an extensive stormwater monitoring network. Data collected as part of the program is used to identify trends in water quality which are largely driven by changes in stormwater runoff. The monitoring data is available on the SWWD Web-based database that allows users to access District data and performs basic statistical and plotting functions. 2024 data is now available on the web database and reports will be uploaded to the website when completed.

Maintenance

- In 2024, Great River Greening continued contract work on the prairie restoration and maintenance at SWWD's Central Draw Storage Facility. Work includes prairie/savanna establishment and maintenance, development and coordination of volunteer events, development and oversight of a simulated grazing (i.e. haying) program, and development of research opportunities with the University of Minnesota. This work will partially be funded through LCCMR funds through Great River Greening. Once restored, the basins will provide regional water quality treatment and flood control while also serving as public open space and providing key connections in regional greenway and trail corridors.
- SWWD, the City of Woodbury, and Great River Greening (GRG) initiated work through GRG's Pollinator Seed Initiative to address the shortage of pollinator-friendly seed. The primary goal of the initiative is to create a sustainable future for pollinator habitat restoration and conservation by creating local sources of genetically appropriate seed which could be harvested when commercial seed suppliers lack sufficient inventory. In 2018, over 10 acres of Koch pipeline corridor and adjacent parkland from Bailey Road to Ojibway Park in Woodbury was planted in native vegetation. This corridor is a prime location not only for seeding and propagation where the corridor is accessible by trail and the current vegetation needs improvement, but also as an ideal setting to engage the neighborhood and schools adjacent to the corridor over 1,500 households and 3 schools within 0.5 miles of corridor. Maintenance of the corridor was ongoing throughout 2022 and continued in 2023.
- SWWD staff completed an intense field review of the Wilmes Lake IESF in late 2023 to assess the
 project for maintenance needs and overall efficacy. Results indicate that the BMP is not performing
 as it should. SWWD is working with its consultants to design a retrofit to be completed in 2025 or
 2026.

Implementation

- SWWD implements projects to achieve District goals and objectives, sometimes in conjunction with partner agencies. Projects include:
 - Nuevas Fronteras TSS and TP filter system (2021)
 - Seasons Park Stormwater Filter (2021)
 - o McQuade Ravine Stabilization (2021)
 - Hasenbank Woods Restoration (2022-Present)
 - o Newport 16th and Cedar TSS BMP (2023)
 - Wilmes Lake Alum Treatment Facility (2023-Present)
 - Hasenbank Stormwater Park (2023-Present)
 - o St. Paul Park 7th Street TSS BMP (2024)
 - o Bluffs Regional Park Ravine Stabilization (2024)
 - o CR74 and Geneva Ave Ravine Stabilization (expected 2026)

Capital Improvement Plan

- SWWD has now completed construction of its Central Draw Storage Facility and Central Draw Overflow projects. Together, this system provides flood control for stormwater draining out of SWWD's Northern Watershed. The system is designed to capture and infiltrate all runoff from the former design storm event and continue to function even under more extreme events. That event has now increased both in rainfall amount and intensity which SWWD's system will continue to handle effectively in order to protect communities at the Woodbury/Cottage Grove border. Additional work is ongoing with both Woodbury and Cottage Grove to analyze their systems that discharge into SWWD's Central Draw in order to optimize operation of those systems and identify potential improvements to protect against increasing storm intensity.
- Restoration of Trout Brook was identified as a local priority by the former Lower St. Croix Watershed Management Organization which previously managed SWWD's Trout Brook watershed. SWWD and its partners developed and implemented a channel remeander and restoration project at Afton Alps Ski Area. That project relocated a ditched stream section out from the middle of the Afton Alps parking lot to the south side of the lot and recreated natural stream features. Construction was completed in 2019. In 2022, design for additional restoration work was completed. That work, including replacement of remaining perched culverts, instream stabilization at Afton Alps, and a new channel in Afton State Park was completed in 2024.

- Wilmes Lake Alum Treatment Facility in Kargel Park. Construction began on this important regional phosphorus reduction BMP in the summer of 2023. Completed components include: mass grading and temporary stabilization, most in-ground utility work, settling pond grading and lining, lift station vaults, building foundation and trail base. Construction will be completed in 2025. Despite its high capital cost of \$4.5 million, this project represented the most cost-efficient option to address heavy watershed phosphorus loading to Wilmes Lake. Once operational, SWWD has an agreement to fund operation and maintenance of the facility through the City of Woodbury's Public Works Department.
- Hasenbank Stormwater Park. Construction of the stormwater park was largely complete by the end of 2024. This project will intercept polluted stormwater runoff leaving Fish Lake before it gets to Powers Lake, and divert it to a series of large infiltration basins in Hasenbank Park. It serves as an example of how to incorporate stormwater management and native habitat restoration into an actively used city park. Several public art installations have also been incorporated into the project to interpret the stormwater treatment processes that will occur at the site. Construction is expected to wrap up in 2025. The total construction budget of this project is approximately \$1.2 million.
- 16th & Cedar Underground TSS BMP. In partnership with the City of Newport, a Contech DSBB water quality treatment device was retrofitted into an existing storm sewer trunk line near the intersection of 16th Street and Cedar Lane in Newport. Construction was completed in 2023. This device will provide significant reductions in sediment, debris and other pollutants from the local drainage area to the Mississippi River. Newport's public works staff will maintain the structure on behalf of the SWWD. Extremely shallow bedrock in this area of the watershed makes BMP retrofits challenging to complete and expensive. This project utilized nearly \$164,000 in BWSR FY23 Watershed-Based Implementation Funding in addition to local funds from SWWD and Newport.
- Bluffs Regional Park Ravine Stabilization. SWWD and Washington County spent much of 2023 finalizing plans for a series of project components aimed at stabilizing a large ravine above Lake St. Croix and reducing peak flow rates into the ravine from the surrounding landscape. Due to funding limitations, the project has been split into two phases. The first phase involves stabilizing an old rail grade embankment along the shore of Lake St. Croix at the bottom of the ravine and repairing/stabilizing an old steel culvert under the grade. Phase two will construct four retention basins with rate control outlets above the ravine, stabilize actively eroding areas of the upper ravine head cuts, and clear buckthorn and thin the forest canopy to allow for a thicker native groundcover layer to establish in the forested ravine. SWWD and the County continue to seek funding to implement these important projects. Phase one was constructed in late 2024 with Phase two to follow when external grant funding can be secured.

• Glacial Valley Park Learning Center and Interpretive Area Design. The District's management plan as required by the conservation easements covering the property has been updated and approved by both Washington County and MnDNR. The management plan now contains the completed conceptual design for the learning center, trails, and interpretive features. SWWD is working with City of Woodbury to plan for implementing the project. Extension of Glacial Valley Road is likely in the next 1-2 years which would provide utilities for the learning center. The City of Woodbury is planning an active park area immediately West of Glacial Valley which will also provide parking for Glacial Valley. SWWD is currently working with the City to review the site plan. There is interest in establishing trails and interpretive signage prior to constructing the learning center as there seems to be a lot of resident use of the existing trail around CDP85. SWWD is working with its consultant to begin the formal design process. Plans should be in place to construct the learning center and associated site improvements when the road is built.

Incentives

- In 2024 SWWD continued its performance-based cost-share program. Instead of reimbursing land owners for a specific percentage of total project cost, SWWD reimburses land owners based on the amount of phosphorus that their project is expected to retain. SWWD's 2023 reimbursement rate was \$5,000.00 per pound of phosphorus retained with reimbursement capped at total project cost. SWWD allocated \$30,000 to 22 projects in 2024. Projects with higher funding levels typically treated runoff from several properties.
- In 2024 the SWWD continued to implement a BMP Maintenance Program. The SWWD has recently installed several stormwater BMPs in conjunction with road improvements projects with Cities where vegetation maintenance is the responsibility of the SWWD. Other older stormwater BMPs installed were also in need of maintenance. Maintenance was performed through contract by Washington Conservation District staff.
- The SWWD Board of Managers awarded \$788,948 through its Coordinated Capital Improvement Program (CCIP) in 2024. Funded work includes de-icing equipment to reduce application of chloride throughout the District and stormwater infrastructure improvements in Woodbury and Cottage Grove.
- SWWD staff worked with Washington Conservation District and the Minnesota Pollution Control Agency to continue development and operation of a groundwater quality regional assessment program. The program consists of collecting seasonal water quality samples from wells existing around the CD-P85 and CD-P86 regional infiltration basins and Bailey Lake. Collected data are included in the SWWD monitoring report and will be used to monitor groundwater quality and serve as an indicator of potential impacts resulting from use of regional infiltration facilities. This effort is part of a larger initiative by State agencies to evaluate potential effects of large scale infiltration.

- SWWD continued its collaboration with the Minnesota Department of Natural Resources with monitoring wells on SWWD property as part of an effort to expand the State's groundwater monitoring network. Information on these wells located on SWWD property can be found at http://www.dnr.state.mn.us/waters/cgm/index.html.
- The SWWD maintains communications with Municipal water suppliers to understand the
 implications of the North and East Metro Groundwater Management area draft plan. A major effort
 of the draft plan is promoting water conservation. The SWWD partners with Municipal water
 suppliers to promote water conservation through residential irrigation retro-fits, education, smart
 technology and stormwater reuse.
- In 2024, the SWWD continued to partner with the Cities of Woodbury and Cottage Grove to address water conservation through smart irrigation, a City-wide Residential Irrigation Controller program. We expect that program to expand to other residential conservation retrofits in 2025.

Fund 4-Education and Information

PURPOSE: TO EFFICIENTLY INFORM AND EDUCATE DISTRICT RESIDENTS AND STAKEHOLDERS

- SWWD participated and continued support of the East Metro Water Resource Education Program (EMWREP). The EMWREP annual activities report is in Appendix B.
- SWWD contracted with Carpenter St. Croix valley Nature Center in 2024 to provide education activities and workshops with 6th graders. Programming includes a 6-week, in-class program focused on water quality and watershed science. The program culminates with a daylong field trip to Carpenter Nature Center. The program will continue in 2025.
- In 2024, SWWD social media presence and reach grew. The SWWD Facebook page obtained 48.7k Views, 24.4k Reach, 822 Content interactions, 245 Link clicks, 2.1k Page Visits, and grew by 88 followers. The SWWD Instagram page obtained 389 Views, 1.3k Reach, 34 Content interactions, 148 Page visits, and grew by ~30 followers (Instagram does not track follower growth for accounts with less than 100 followers). SWWD posted 74 Facebook posts and 19 Instagram posts in 2024.
- WD staff continues to collect and organize all SWWD monitoring data from the Washington Conservation District. SWWD maintains an online database for accessing monitoring data through the SWWD website.

- In 2024, SWWD and the South Washington County School District (ISD833) continued its campus greening efforts. As part of ISD833 school improvement projects, SWWD works with ISD833 and school staff to plan and implement campus greening projects. Those projects generally include conversion of turf to prairie, woodland restoration or tree planting, and construction of outdoor classrooms. Projects are complete or ongoing at Lake Middle and Middleton Elementary campus, Nuevas Fronteras Elementary, Valley Crossing Elementary, Crestview Elementary, and the Cottage Grove Middle and Grey Cloud Elementary campus. When complete, campus greening results in a more resilient landscape while also providing expanded opportunities for on-site outdoor education, increased stormwater infiltration and requires less irrigation, fertilizer, and pesticide use.
- In 2024, the SWWD continued to provide funds to the MN Stormwater Research Council (MSRC).
 The MSRC is an independent organization of stormwater professionals, practitioners, managers, engineers, and researchers working cooperatively to facilitate applied stormwater research in MN.
- In 2024, SWWD hosted two workshops to gather public feedback that would inform the next Watershed Management Plan. Events featured speakers from the Metropolitan Council, and the Minnesota State Climatology Office. Total attendance of 20 community members.
- SWWD hosted two community events, one for the official opening of the Trout Brook restoration project and the exhibition of the 2024 Artist-in-Residence.
- As reported by Adopt-a-Drain, 579 new storm drains were adopted within the SWWD cities of Woodbury (261), Oakdale (245), and Lake Elmo (73).

Fund 5-Operational

- The SWWD District Board annually prioritizes work activities from the long range work plan constituting targeted efforts for the coming year. These work activities translate into the annual work plan and budget for the SWWD. The annual work plan allows the District Board to establish a short term operating budget while maintaining connection to the overall long term management goals of the District. Six Management areas have been defined through which the SWWD will work to execute the annual work plan. The areas are: (1) Planning, (2) Regulatory, (3) Implementation & Maintenance, (4) Education & information, (5) Operational, and (6) Debt Service Fund. According to Minnesota Statute 103D.911 the SWWD must hold a hearing and adopt a preliminary budget on or before September 15th of each year. The Final budget certification is due to Washington County by December 31st of each year.
- In 2024, SWWD continued collecting stormwater utility fees in the South Washington Watershed, East Mississippi, and Lower St. Croix management units. Revenue will be used to fund water quality projects only within each of the management units.

• The SWWD maintains an operational general fund for daily operations of the district. Operational general funds include, staff, managers, office expenses, insurance, audit and legal services.

Fund 6-Debt Service

In 2011, the SWWD issued general obligation bonds for the construction of three projects within the
East Mississippi management area. In 2016, SWWD refinanced the 2011 general obligation bonds.
In March 2019, the 2011 general obligation bonds crossed over to general obligation refunding
bonds resulting in a principal payment made by SWWD in the amount of \$3,145,000. In 2024,
SWWD continued principal and interest payments on the 2016A General Obligation Refunding
Bonds, and will continuing paying on these bonds through March 2031.

2025 Workplan

As part of its annual reporting, the District evaluates performance of programs and progress toward meeting goals through implementation indicators established in this Plan and adopted guidance documents. SWWD has developed a workplan layout matching issues and program categories and subcategories outlined in the Watershed Management Plan:

2025 Work Plan South Washington Watershed District

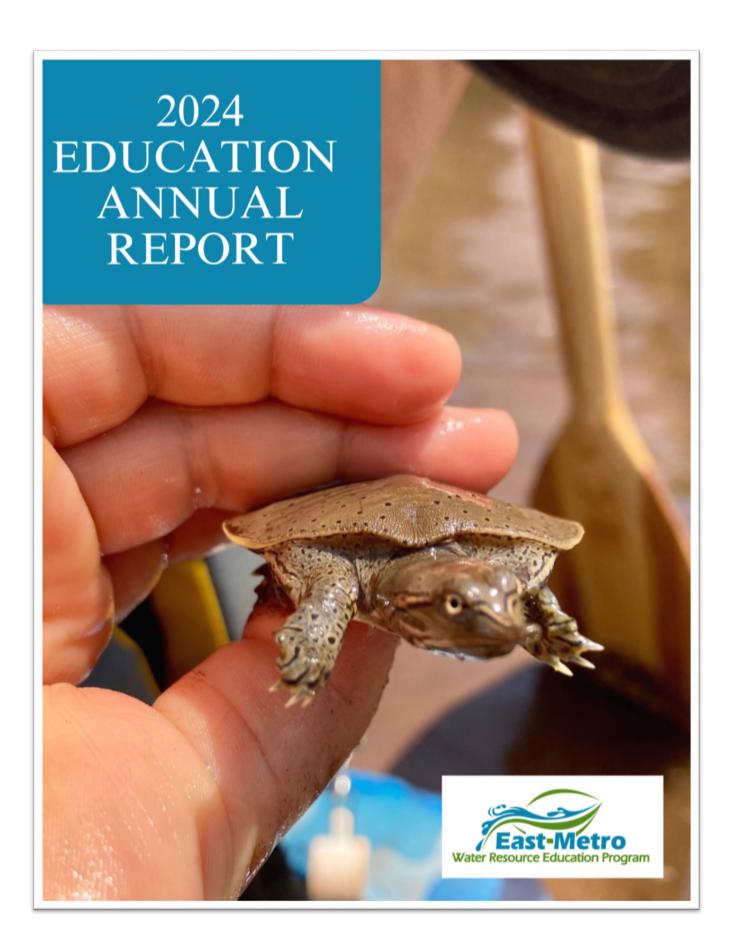
Date Established: Date Last Updated: Last Updated by: 1-Jan-23 25-Mar-25 MAI

0 (1	Management Area / Action Item	SWWD Staff	Professional Services	Capital Outlay	WCD Technical Services	Manageme Area Tota
Sι	n) Pranning urface Water (1) en Staff time Modeling	\$14,880.00				\$427,68
Ge	en Staff time Resource Mgmt Plan en Staff time Climate Adaptation	\$7,440.00 \$11,160.00				
Ge	en Staff time Flood Damage Reduction	\$7,440.00	\$15,000.00			
S١	WW Climate Adaptation		\$25,000.00 \$15,000.00			
S١	WW Resource Management Plan WW Flood Damage Reduction		\$0.00 \$0.00			
ΕI	MW Hydrologic Modeling MW Climate Adaptation		\$0.00 \$50,000.00			
LS	MW Flood Damage Reduction SC Resource Management Plan		\$100,000.00 \$10,000.00			
	Climate Adaptation Flood Damage Reduction		\$5,000.00 \$0.00			
Gi	roundwater (2)					
Ge	en Staff Time en Modeling	\$2,480.00				
	atural Resource (3)					
Ge	en Greenway Implementation	\$24,800.00				
Ge	en Wetland Inventory en Ravine Survey	\$0.00 \$6,200.00				
	en In Lake Restoration Planning	\$11,160.00	\$50,000.00			
	fatershed Plan (4) Staff time Watershed Plan Update	\$47,120.00	\$25,000.00			
	2) Regulatory					\$61,70
	evelopment Reviews/Regional Assessments (1) Staff Program Management	\$4,650.00				
	en Consultant Development Review letland Conservation Act (2)		\$15,000.00			
Ge	en rosion and Sediment Control (3)	\$3,100.00			\$1,000.00	
Ge	en	\$1,550.00	\$20,000.00			
_	ules (4) en	\$12,400.00	\$4,000.00			
	3) Implementation & Maintenance					\$4,141,48
_	onitoring (1) en Staff time	\$8,804.00				
W	WCD Monitoring Program /atershed Restoration (2)				\$250,000.00	
Ge	en Targeted Retrofit WW Street Sweeping	\$37,200.00		\$500,000.00		
S۱	Targeted Retrofit (Wilmes Lake)			\$200,000.00 \$200,000.00 \$400,000.00		
S۱	WW Targeted Retrofit (Powers Lake)			\$150,000.00		
S۱	WW Targeted Retrofit (Ravine Lake) WW Targeted Retrofit (Mississippi River)			\$250,000.00 \$50,000.00		
	WW Climate Resiliency en Rural	\$12,400.00		\$100,000.00		
G	en Ag BMP Pilots en Climate Resilency	\$16,120.00				
Ge	en Greenway Habitat-In Lake In Stream	\$16,120.00		\$400,000.00		
Ge	en Campus Greening En Linear Corridor			\$100,000.00 \$100,000.00		
Ge	en Buffers en In Lake			\$50,000.00 \$50,000.00		
_	WW Street Sweeping WW Targeted Retrofit (Mississippi River) La/Ria Lake Outlets			\$150,000.00 \$100,000.00		
ΕN	WW Climate Resiliency CT Targeted Retrofit (Mississippi River)			\$10,000.00 \$0.00		
LS	argeted Retrofit (St. Croix River) Climate Resiliency			\$150,000.00 \$5,000.00		
М	aintenance (3)			\$5,000.00		
S١	en //W BMP Maintenance	\$24,800.00		\$250,000.00		
LS	MW BMP Maintenance SC BMP Maintenance			\$50,000.00 \$25,000.00		
	apital Improvement Plan (4) EN Program Management	\$4,960.00				
S۱	WW Overflow Maintenance WW Learning Center Construction	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\$75,000.00 \$0.00		
LS	SC Trout Brook			\$0.00		
Ge	centives (5) en (Water Quality Cost Share Program)	\$62,000.00		\$70,000.00	\$12,000.00	
Ge	en (AG BMP Program) en (Coordinated CIP)	\$31,000.00		\$50,000.00		
	en (Flood Damage) WW (Flood Damage)	\$6,200.00		\$0.00		
S١	WW (Coordinated CIP) WW (Flood Damage)			\$650,000.00 \$0.00		
ΕI	MW (Coordinated CIP)			\$5,000.00		
LS	SC (Flood Damage) SC (Coordinated CIP)			\$0.00 \$5,000.00		
Ge	roundwater Sustainanility (6) en	\$7,440.00				
SV	WW (Irrigation Controllers and Water Softening)			\$100,000.00		
11	l) Education & Information					\$301,60
Èc	ducation (1)					φου 1,6L
GI	EN Staff	\$24,800.00				
£	Local Education CAC		\$4,800.00 \$1,000.00			
F	EMWREP Master Watershed Stewards		\$38,700.00 \$0.00			
#	Experiential Programs Metro Watershed Partners		\$2,500.00	\$40,000.00		
	formation (2)		ψ2,000.0U			
اق	Staff	\$24,800.00				
+	MN Stormwater Research Website/Databases		\$100,000.00	\$25,000.00		
╁	Stormwater Utility Administration GIS		\$15,000.00 \$13,000.00			
F	Artist-in-Residence		\$12,000.00			
(5	5) Administrative/Operational					\$499,85
	EN	AOT -				¥ - 793,05
上	Salaries/Benefits Manager Per Diems/Expenses	\$270,000.00 \$19,000.00				
\vdash	Office Rent Employee Expenses	\$41,152.00 \$12,000.00				
F	Employee Training Office Equipment	\$20,000.00 \$20,000.00				
#	Office Supplies	\$7,000.00				
t	District Vehicle Legal Notices	\$5,000.00 \$200.00				
╁	Dues Insurance/Bond	\$15,000.00 \$45,000.00				
F	Accounting Payroll Monthly Accounting	\$5,400.00 \$2,600.00		_		
#	Audit	\$14,000.00				
t	Legal HR/Other Consulting	\$20,000.00 \$3,500.00				
F	Equipment	\$0.00				
16	S) Debt Service					\$100,00
(6	MW			\$100,000.00		¥.00,00

Appendix A 2024 Audit Report on Compliance



Appendix B Education



2024 Education Annual Report

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2024 Members of the East Metro Water Resource Education Program:

Afton • Bayport • Brown's Creek Watershed • Carnelian-Marine-St. Croix Watershed
Chisago County • Chisago Lakes Improvement District • Chisago Soil and Water Conservation District
Comfort Lake-Forest Lake Watershed • Cottage Grove • Dellwood • Forest Lake • Grant • Hugo
Isanti County • Isanti Conservation District • Lake Elmo • Middle St. Croix Watershed • Newport
Oak Park Heights • Oakdale • Ramsey-Washington Metro Watershed • Rice Creek Watershed
South Washington Watershed Stillwater • St. Paul Park • Valley Branch Watershed
Washington Conservation District • Washington County • Willernie • West Lakeland
Woodbury • Wyoming

2024 EMWREP HIGHLIGHTS

NATIVE GARDENS SPREAD LIKE WILDFLOWERS

400+ people attended workshops to learn about planting & caring for native landscapes.



LAKE & RIVERWAY LANDOWNER SURVEYS



We surveyed St. Croix Riverway landowners and Chisago Co lakeshore landowners to improve our outreach strategies

MINNESOTANS ADOPT 24,990 STORM DRAINS

Including 1106 drains in Washington County and 106 drains in Chisago County.



[EACHING YOUTH ABOUT WATER

We engaged more than 3600 4th, 5th and 6th grade students through Children's Water Festivals and school programming.

REALTORS LEARN ABOUT SHORELINES



100 realtors took our new digital on-demand shoreline course. The class offers 2.5hrs of continuing ed credits.

LOCAL LEADERS LEARN BY BOAT & BUS

We held a three-part learning series by boat, bus & barn, attended by 140 local leaders in Minnesota & Wisconsin.



HOAS GET SMART ABOUT STORMWATER



We conducted audience research with HOAs (homeowner associations), then created an education toolkit & launched a learning series.

WE WERE EVERYWHERE!

We attended 85 events & workshops and kept a robust presence in social media, newspapers, & even TV.



About the Shared Education Program

Background: The East Metro Water Resource Education Program (EMWREP) is a local government partnership, formed in 2006, which is hosted by the Washington Conservation District. EMWREP's goal is to educate community residents, businesses, staff and decision-makers about issues affecting local lakes, rivers, streams, wetlands and groundwater resources and to engage people in projects to protect and improve the health of these water resources.

Guiding philosophies and education approach: EMWREP acts as a connector and a catalyst to propel new initiatives, support the work of internal and external partners, and amplify the impact of locally led initiatives. Our education programs are action-oriented, encourage both individual and systemic change, and utilize social science research to guide development of effective outreach and engagement strategies.

EMWREP Partnership Structure:

In 2024, EMWREP partners included:

- <u>Cities and Townships</u>: Bayport, Cottage Grove, Dellwood, Forest Lake, Grant, Hugo, Lake Elmo, Newport, Oakdale, Oak Park Heights, Stillwater, St. Paul Park, Willernie, and Woodbury, West Lakeland Township
- Counties: *Chisago, *Isanti, *Washington
- Soil and Water Conservation Districts: *Chisago, *Isanti, *Washington (host)
- Watershed Management Organizations: *Brown's Creek, *Carnelian-Marine-St. Croix, Chisago Lake Improvement District, *Comfort-Lake Forest Lake, Rice Creek, Ramsey-Washington Metro, *South Washington, and *Valley Branch Watershed Districts, and the *Middle St. Croix Watershed Management Organization

EMWREP partners jointly fund the program based on a set formula, with fees determined by population (cities and counties) or taxable market value (watershed organizations). See <u>Appendix A</u> for more detail. The program funds 1.5 FTE in staff support, plus materials and other expenses.

EMWREP education staff also work collaboratively with the agronomy outreach and watershed education staff for the Lower St. Croix Watershed Partnership, who are separately funded through a state grant. During 2024, EMWREP hosted two AmeriCorps positions.

2024 Education staff:

- <u>EMWREP (1.5 FTE)</u>: Angie Hong, Barbara Heitkamp (Jan-April), and Jessica Sahu Teli (April Dec)
- <u>Lower St. Croix Partnership</u>: Barbara Heitkamp (0.5 FTE watershed education) + agronomy outreach (vacant)
- AmeriCorps Climate Impact Corps: Lori Maxfield and Hannah Peterson

EMWREP staff communicate regularly with local staff at partner organizations, council members, and board members; prepare an annual report detailing program activities; and provide data for partners' MS4 Permit reports. A steering committee comprised of representatives from each of the partner organizations meets twice a year to provide recommendations on the program budget and activities. EMWREP plans and reports are available on-line at www.mnwcd.org/emwrep.

^{*}Indicates members that are also in the Lower St. Croix Watershed Partnership

Coordination and Collaboration: The EMWREP and Lower St. Croix Watershed partnerships help to strengthen relationships between member entities and allow for better coordination and less overlap in the management of local water resources. EMWREP staff also provide leadership for several regional partnerships including Watershed Partners; St. Croix Environmental Education Partnership (SWEEP); Blue Thumb – Planting for Clean Water; and Minnesota Water Stewards.

Resources and Education Goals: Our collaborative education and engagement programming supports the following long-term goals:

- 1. Healthy lakes, rivers, streams and wetlands;
- 2. Clean, useable, and plentiful groundwater resources;
- 3. Connected habitat corridors;
- 4. An informed, environmentally conscious, and engaged populace that takes individual and collective action to protect and restore natural resources.

Secondary goals include:

- 1. Building social capacity for environmental change and strengthening community connections through partnerships, volunteer engagement, and education programs that encourage both individual and systemic change;
- 2. Building climate resiliency; and
- 3. Ensuring that all people in our communities benefit equally from the protection and restoration of natural resources and are equally engaged in the projects and programs that we implement.

Priority objectives for 2024:

- 1. Engage public and private landowners to plant native landscapes and raingardens, especially in priority locations.
- 2. <u>Maintain and restore natural shorelines</u>.
- 3. Promote conservation development.
- 4. Minimize stormwater runoff pollution.
- 5. Build social capacity for environmental change and strengthen community connections.







(Clockwise from upper left) Youth help to plant trees near Long Lake in Stillwater; Jessica, Angie and Barbara celebrate after the St. Croix workshop on the Water; Releasing heritage brook trout into Trout Brook at Afton State Park; Adopt-a-Raingarden volunteers pose for a photo; Hannah and Lori get ready to make seed balls at the Minnesota State Fair; Local decision-makers tour Jackson Meadow, a conservation development in Marine on St. Croix.

Objective 1: Engage public and private landowners to plant native landscapes and raingardens, especially in priority locations.

Components of this work include:

- 1. Educating and engaging urban, rural, and commercial landowners
- 2. Collaborating with schools and religious institutions
- 3. Developing targeted outreach campaigns
- 4. Identifying and making "big picture" connections
- 5. Training landscape contractors and professionals
- 6. Utilizing and supporting regional programs such as Blue Thumb Planting for Clean Water
- 7. Utilizing and supporting local, partner-led programs such as cost-share grants and site visits.

2024 Activities:

Continued participation in the Blue Thumb - Planting for Clean Water Partnership

The Blue Thumb – Planting for Clean Water Program is a Minnesota partnership hosted by Metro Blooms. Public, private, and nonprofit partners work together to educate the public about native plants, raingardens and shoreline plantings and encourage homeowners to complete projects on their land. The program operates the www.BlueThumb.org website, hosts workshops and other events, delivers educational messaging through several media platforms, and has produced numerous print resources, including the Blue Thumb Guide to Year Round Yard Care.

Staff from Rice Creek Watershed District, EMWREP, and Washington Conservation District worked collaboratively to grow Blue Thumb into a statewide partnership and develop marketing materials during the first decade of the program (2007-2017) and EMWREP continues to support the Blue Thumb financially (\$500 per year), as a guest speaker for events, and through our media and communications.

Since 2019, Blue Thumb has been affiliated with the Minnesota Lawns to Legumes program, which is overseen by the Minnesota Board of Water and Soil Resources (BWSR). To date, 33,000 Minnesotans have applied and 8200 have received grant support from Lawns to Legumes to create pollinator-friendly plantings such as bee lawns, native gardens, prairies, and flowering native trees. Pollinator planting projects also help to restore natural landscapes, reduce stormwater runoff pollution, and build climate resiliency for drought and mega-rains.

There is widespread interest in the Lawns to Legumes program and EMWREP continues to promote these and locally administered stewardship grant programs for landowners.

Provide outreach support for cost-share grant programs.

In 2024, EMWREP continued to promote partner-led programs such as watershed cost-share grants and site visits. There were 363 site visit requests in Washington County. A goal for future years could be to begin tracking site visit requests in other counties as well.

Workshops and webinars about native landscapes

Approximately 400 people participated in workshops and webinars taught by EMWREP staff in 2024 to learn about creating and managing native landscapes.

Date	Event	Location	# attendees
March 9	What's the Buzz about Native Plants? At the Chisago County Master Gardener Expo	Lindstrom	30
March 12	Bringing Life to Your Landscape: Planting for Pollinators and Wildlife	Oakdale	30
March 19	Gardening with native plants	online	50
May 28	Caring for your woodlands	Afton	70
Aug. 13	Plants, Pollinators and Pints	St. Paul	80
Sept 12	Plants, Pollinators and Pints	St Paul	80
Oct. 23	Creating bird-friendly native landscapes	Bloomington and on-line	60

Habitat restoration and gardening events

Education staff attended numerous community events and also helped to recruit volunteers for native planting projects. *Note that additional community events, not specifically related to native landscaping or habitat restoration, are listed on pages <u>37-38</u>.

- April
 - o Tue., April 2: Prescribed burn open house at Lake Elmo Park Reserve
- May
 - o Sat., May 4: Pollinator habitat planting at Lake Elmo Park Reserve.
 - o Fri., May 10: Native planting event at OH Anderson Elementary in Mahtomedi
 - o Sat., May 11: Raingarden clean-up event in Stillwater
 - o Sat., May 11: St. Paul Park Art & Garden event
 - o Sat., May 18: Washington County Master Gardener plant sale
 - o Sat., May 18: Tighe-Schmitz Park open house in Birchwood Village
 - o Sat., May 18: Long Lake bird habitat planting in Stillwater
- June
- Sat., June 1: Landscape Revival Native Plant Expo and Market in Oakdale
- o Tue., June 4: Mill Stream Restoration Open House in Marine on St. Croix
- July
 - o Sat., July 20: Master Gardener Garden Tour in Washington County
- August
 - Sat., Aug. 17: Buzzin' Backyards: The Art of Bringing Nature to Your Door at Carpenter Nature Center
- SEPTEMBER
 - o Friday, Sept. 6: Scandia tree distribution
 - o Saturday, Sept. 7: Prairie seed collection in Bayport

Multimedia content about native landscapes and raingardens

- 1. Relevant blog posts (and newspaper articles) at Angie Hong's eastmetrowater.org
 - O In the battle against buckthorn, patience and plants are winning strategies (Jan. 4, 2024) Critical period cutting shows promise as an herbicide-free control strategy. Research shows it is also important to replant woodlands with native trees, shrubs, flowers and grasses after removing buckthorn.
 - Sowing Native Seeds in Winter (Jan. 25, 2024) Though it may not seem intuitive, winter is actually a great time to begin sowing seeds for native perennial grasses and flowers.
 - Resource Highlight: Blue Thumb Planting for Clean Water (Feb. 15, 2024)
 "Learn about upcoming workshop, native plant retailers, garden templates, and other resources to help you go blue & green!"
 - Leave some for the birds and bees please (Feb. 29, 2024) "Angie pretended to eat a maggot in the name of science. Once you learn why, you'll want to do it too"
 - o <u>Burn Baby, Burn</u> (March 14, 2024) "Prairie, oak savanna, pine barrens, and wet meadows all have something in common they like to burn, baby burn."
 - Three ways to help pollinators this spring (April 18, 2024) "The single most important thing you can do to protect pollinators is to plant and preserve native habitat on your land and in your community. Washington Conservation District and Blue Thumb Planting for Clean Water have resources to help you get started."
 - o A killer in the forest (May 24, 2024) "Emerald ash borer is poised to decimate the forests of Minnesota."
 - And it was all yellow (July 18, 2024) "If you peruse the Minnesota Wildflowers online field guide, you will find an impressive 303 species of plants native to Minnesota that all have yellow flowers. Check out this weekend's Master Gardener Garden Tour or an upcoming event to learn more about gardening with native plants."
 - Living on a Few Acres, Dozing with a Few Bees (Sept 7, 2024) "For small farmers, it can be challenging to find the right combination of products and services to create a farm operation that is truly sustainable, both ecologically and economically."
 - <u>Lazy gardening tips for chubby bird enthusiasts</u> (Nov. 1, 2024) "Learn how to create a bird-friendly landscape at your home."







(Left to right) Staff from Washington Conservation District have been collaborating with teachers at OH Anderson Elementary in Mahtomedi to create a native prairie landscape; Butterfly on goldenrod near the Middle Rice Creek restoration project in Arden Hills; Angie Hong talks at an event in Marine on St. Croix.

TIKTOK, WON'T STOP?

One of the biggest challenges in public education is finding ways to connect with people who don't already support your mission and goals. Traditional public meetings usually attract the same relatively small group of people who either love you or hate you, and environmental fairs are often poorly attended.

Adding an additional layer of complexity is the media and communications landscape, which has changed dramatically over the past twenty years. Numerous local newspapers have down-scaled or gone out of business, and people are much less likely to subscribe to large papers like the Pioneer Press and Star Tribune. A study by Pew Research from September of 2024 found that 58% of Americans primarily access their news through online platforms, compared with only 32% who watch television news. Relatively few people prefer radio (6%) or print (4%).

One major strength of the EMWREP program has been our ability to innovate and adapt our outreach strategies to reach new people and adapt to the changing times. Here are a few examples:

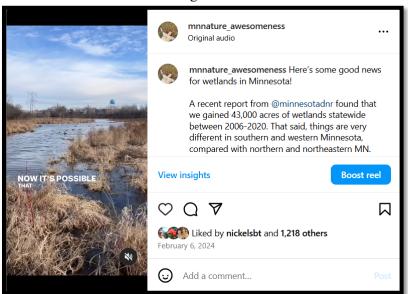
- We use audience research to develop targeted outreach campaigns. EMWREP regularly uses surveys, focus groups, and listening sessions to learn about people's barriers and motivations and develop successful education strategies. These projects are small-scale and locally focused, and usually involve a mix of communication strategies, including direct mailings, one-on-one conversations, and small group meetings.
- We develop messaging and education materials designed to appeal to people's interests. One example of this is the Blue Thumb program, which showcases images and examples of beautiful native gardens with butterflies and birds. By making it easy for people to find native plants and get grants and technical support, the program has successfully shifted social norms in the Twin Cities area and helped to propel a growing interest in landscaping with native plants.
- We offer online and in-person options for learning. When the COVID pandemic shut down in-person activities in 2020, EMWREP quickly pivoted to offer our spring workshops as online webinars. We soon observed that our attendance numbers were higher (60-100 people per webinar, compared with 20-30 for in-person workshops) and that we were able to engage more young adults through online classes. Now, in 2024-25, we offer a mix of online and in-person classes to appeal to people's different preferences.
- We use TikTok, Instagram and other social media platforms to share information and educational content. The @mnnature_awesomeness account, created in 2020, has a large following on TikTok (110.4k) and Instagram (36.3k). Posting short-form videos to these platforms has allowed us to reach hundreds of thousands of people in the local area, make cross-cultural connections with Ojibwe, Black, and Latinx creators, and gain additional media coverage from a wide variety of news and entertainment sources local TV stations, Star Tribune and Pioneer Press, Explore MN, Minnesota Bound, and more.

With a TikTok ban looming in the near future (or maybe not?) we may adjust our online communication strategies in 2025. Happily, EMWREP has successfully grown its presence on Instagram over the past two years. We will be posting more content to YouTube, and will also continue to utilize the eastmetrowater.org blog site, as well as our many partner websites and Facebook pages, to share information with the public.

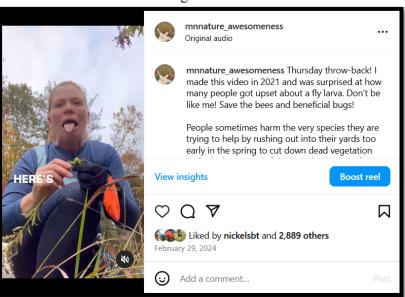
The only thing certain is change!

Videos about restoring native landscapes shared on @mnnature awesomeness accounts

- o Managing invasive buckthorn (1-2-24) = 26,600 views
 - 11.6k on TikTok + 15k on Instagram
- o Status of wetlands in Minnesota (2-6-24) = 35,000 views
 - 20k on TikTok + 15k on Instagram

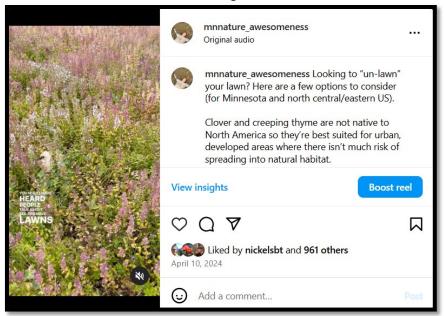


- o Beneficial insects overwinter in the stems of plants (3-1-24) = 71,000 views
 - 8k on TikTok + 63k on Instagram

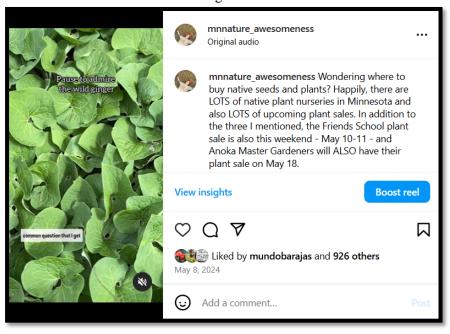


- $\frac{5 \text{ native trees for your yard}}{5 \text{ native trees for your yard}} (3-18-24) = 13,800 \text{ views}$
 - 5k on TikTok + 8.8k on Instagram
- \circ Using prescribed burns for prairie restoration (3-22-24) = 10,000 views
 - 3k on TikTok + 7k on Instagram
- o <u>10 native plants for shady yards</u> (4-9-24) = 22,200 views
 - 9.6k on TikTok + 12.6k on Instagram

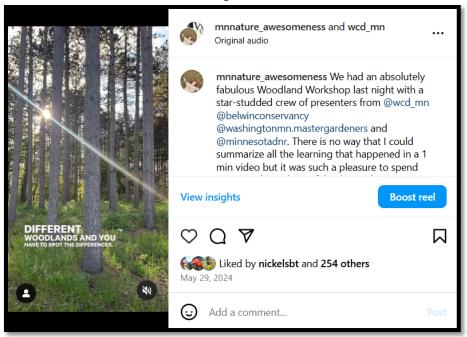
- \circ Lawn alternatives (4-10-24) = 43,300 views
 - 14.5k on TikTok + 28.8k on Instagram



- Native plants that are tall (4-15-24) = 18,700 views
 - 3k on TikTok + 15.7k on Instagram
- $\frac{\text{Let's talk about raingardens}}{\text{Let's talk about raingardens}}$ (4-16-24) = 7000 views
 - 1.3k on TikTok + 5.7k on Instagram
- o Woodland wildflowers (4-25-24) = 19,000 views
 - 11.5k on TikTok + 7.5k on Instagram
- \circ Where to buy native plants (5-7-24) = 27,500 views
 - 4k on TikTok + 23.5k on Instagram



- \circ Woodland health (5-29-24) = 16,300 views
 - 10.3k on TikTok + 6k on Instagram



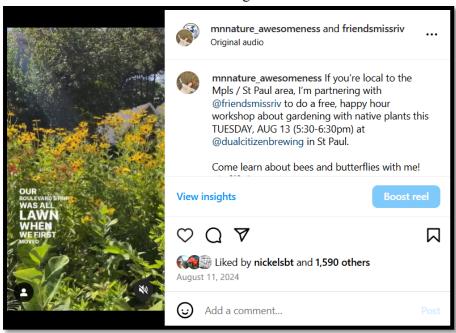
- Emerald ash borer (6-3-24) = 25,700 views
 - 13.1k on TikTok + 12.6k on Instagram
- o Prairies, oak savanna and pine barrens (6-9-24) = 23,200 views
 - 5k on TikTok + 18.2k on Instagram
- \circ Wild rose (6-23-24) = 12,000 views
 - 3.4k on TikTok + 8.6k on Instagram
- o Minnesota milkweeds (7-8-24) = 120,200 views
 - 81.5k on TikTok + 38.7k on Instagram



- o Measure soil health in your yard (7-15-24) = 31,000 views
 - 20k on TikTok + 11k on Instagram

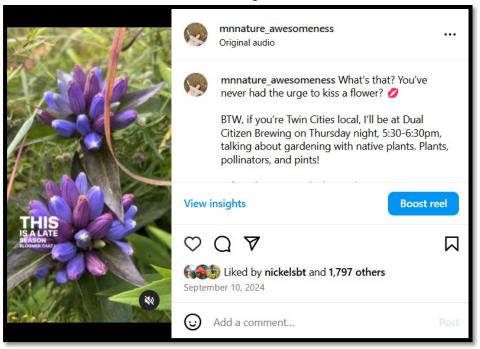


- o Planting a boulevard with native plants (8-11-24) = 32,700 views
 - 6.3k on TikTok + 26.4k on Instagram



- \circ Honeycomb Cottage (8-14-24) = 21,300 views
 - 2.6k on TikTok + 18.7k on Instagram
- o Planting native plants in the fall (8-31-24) = 40,800 views
 - 2.8k on TikTok + 38k on Instagram
- \circ How to get rid of a lawn or weeds to start a native garden (9-3-24) = 9600 views
 - 3.4k on TikTok + 5.4k on Instagram

- \circ Blue bottle gentian (9-10-24) = 63,800 views
 - 9.3k on TikTok + 54.5k on Instagram



- \circ Late season bloomers (10-1-24) = 25,500 views
 - 2.1k on TikTok + 23.4k on Instagram
- o <u>Drought and EAB impacts on trees</u> (10-3-24) = 38,100 views
 - 6.8k views on TikTok + 31.3k views on Instagram
- o Fall yard and garden prep (10-23-24) = 20,200 views
 - 2.2k on TikTok + 18k on Instagram

Graphic design support

During 2024, Hannah Peterson developed interpretive signs to be installed in Afton and Baytown Township at the site of two habitat restoration projects. In addition, Barbara Heitkamp worked with Chisago SWCD to create a new log for their organization.



Objective 2: Maintain and restore natural shorelines.

Components of this work include:

- 1. Educating and engaging shoreline landowners
- 2. Collaborating with lake associations
- 3. Training landscape contractors and professionals
- 4. Training realtors selling shoreline properties
- 5. Educating and engaging local leaders from cities, townships and counties to adopt enhanced shoreline ordinances
- 6. Utilizing and supporting local, partner-led programs such as cost-share grants and site visits.
- 7. Collaborating with external partners such as Minnesota DNR and MN Lakes and River Advocates (MNLRA)

2024 Programs and Activities:

In 2024, EMWREP collaborated with the Lower St. Croix Partnership to develop training modules for shoreline contractors and realtors selling shoreline property. We conducted a survey of St. Croix Riverway landowners in the Middle St. Croix WMO, helped Chisago SWCD to conduct a survey of lakeshore landowners on Goose Lake, and supported several partners who are working on large-scale stream restoration projects (South Washington WD, Brown's Creek WD, Carnelian-Marine-St. Croix WD, and Rice Creek WD). In addition, we continue to share information with shoreline owners through special mailings, at community events, and through our e-newsletter and social media platforms.

Shoreline contractor workshop – March 4

In March, we hosted a half-day professional training for shoreline contractors that focused on meeting state and local rules, protecting fish and wildlife, and providing shoreline landowners with a quintessential Minnesota experience. The workshop included short presentations from local experts, as well as a panel discussion with Q & A. Topics covered included:



- Resources and local assistance for better shoreline projects.
- o Understanding permit rules and who to contact when starting a new project.
- o Avoiding common pitfalls and costly repairs in the future.
- o Learning shoreline landscaping basics and how to create more eco-friendly designs.
- Finding creative ways to meet clients requests without impacting fish and wildlife or creating erosion problems.

Twenty-six contractors attended and we received great feedback in our evaluations and post-workshop conversations. People appreciated the wealth of expertise in the room, as well as the variety of topics presented. Find PDFs of the presentations here.

Partners include Blue Thumb - Planting for Clean Water, Carnelian - Marine - St. Croix Watershed District, Chisago Soil and Water Conservation District, Comfort Lake - Forest Lake Watershed District, Lower St. Croix Watershed Partnership, Valley Branch Watershed District, and Washington Conservation District.



NEW On-Demand Shoreline Course available to realtors

In April, EMWREP and the Lower St. Croix partnership launched a new on-demand digital workshop for realtors who specialize in selling shoreline properties. The course was developed in collaboration with several partners from the east-metro area (Isanti SWCD, MN DNR, and MN BWSR) and the St. Paul Area Association of Realtors. It is designed to enhance realtors' understanding of shoreline-specific regulations and management, helping them guide clients to properties that fulfill their lakeshore aspirations.

Accredited by the Minnesota Commissioner of Commerce, this workshop offers 2.5 hours of continuing real estate education credits. For more information and to access the course, visit: https://spaar.com/shoreline-real-estate/

Course presenters and their topics include:

- Dan Petrik and Ceil Strauss from the Minnesota DNR discuss Minnesota's Near-shore Land Use Standards and Shoreland Management Program.
- Ben Meyer from the Minnesota BSWR covers the Wetland Conservation Act focusing on regulation, compliance, and enforcement.
- Tiffany Determan from Isanti SWCD shares insights on defining the Minnesota lake experience to help clients find their ideal lakeshore property.
- Barbara Heitkamp from the Lower St. Croix Watershed Partnership talks about promoting stewardship and protection of lakes and rivers.

During 2024, 97 realtors completed the class. Participants provided overwhelmingly positive feedback, rating the class an average of 4.5 / 5 (Very good – exceptional). Here are a few quotes:

"Interesting course"

"Great information, thank you! (Should be taught at all Minnesota schools.)"

"Excellent educational course. The experts who presented made it so much better than any written course. I learned a lot of great information!"

Middle St. Croix WMO Riverway Landowner Survey

In June 2024, EMWREP worked with Middle St. Croix Watershed Management Organization (MSCWMO) to conduct a mailed survey of 476 riverway landowners in Bayport, Lakeland, Lakeland Shores, Lake St. Croix Beach, St. Mary's Point, and West Lakeland. The goal of the survey was to assess landowners' experiences, ideas and opinions related to shoreline and bluffland issues and to identify opportunities for collaboration to reduce erosion, improve habitat for fish and wildlife, and protect/improve water quality.

79 people completed the mailed survey (17% response rate). Riverway landowner said they care about seeing wildlife, maintaining clean and clear water, and avoiding algae blooms. They are also concerned about terrestrial invasive species and shoreline erosion. Happily, nearly 70% of riverway landowners who responded to the survey say they are or might be interested in working with the MSCWMO to improve riverway habitat and reduce bluff erosion. In particular, they are interested in free site visits, cost-share grants, and landscape design templates that they can use on their own. MSCWMO board members discussed the survey responses and next steps for landowner outreach at their Oct. 10 board meeting.

Read the full survey results.







Above: MSCWMO recently surveyed landowners on the St. Croix River in Bayport, Lakeland, Lakeland Shores, Lake St. Croix Beach, St. Mary's Point, and West Lakeland.

Lake and stream events

- Tue, March 12: Comfort Lake Association Meeting
- Wed., May 15: Brown's Creek Tributary Restoration project tour in Stillwater
- June 1: RWMWD WaterFest at Lake Phalen
- Tue., June 11: Bone Lake de-listing celebration in Scandia
- Wed., June 26: Big Marine Lake community meeting in Scandia
- Wed., July 10: Lakes Appreciation Day at Lions Park in Lindstrom
- Oct. 9: Trout Brook Celebration at Afton State Park

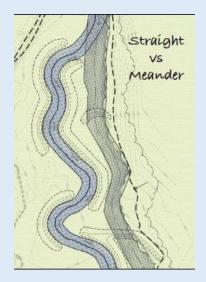
East Metro Lakes EMWREP manages an e-newsletter for lake associations and shoreline owners, which is delivered 4-6 times per year. The email has 161 subscribers in Chisago, Isanti, Ramsey and Washington Counties (Sign-up here).

New Education Materials

We continue to utilize the Lower St. Croix website as a resource hub for shoreline landowners: www.lsc1w1p.org/shorelines. Some of the education materials created by EMWREP and Lower St. Croix staff include:

- What to ask your shoreline landscape contractor
- For the Lake's Sake: A how-to guide on project maintenance
- Hiring a contractor to remove your boat, dock, or lift? Flyer Postcard

MAKING STRAIGHT STREAMS WIGGLY AGAIN



A new future for an old stream? The Mill Stream powered Minnesota's first commercial saw mill and gave rise to the community of Marine on St. Croix in 1839 – two full decades before Minnesota became a state. Now, nearly 200 years later, the people of Marine are dreaming about a new future for this tiny but beloved stream.

In 2023-25, EMWREP has been working with Carnelian-Marine-St. Croix WD to host community meetings to develop a design plan for the restoration project. The goal of this ecological restoration is to reconnect the segment of Mill Stream between Hwy 95 and Judd St. to higher quality habitat on the west side of Hwy 95 and improve aquatic health throughout the stream corridor. Read more: A new future for an old stream?

Carrying stories around the bend – Restoring Rice Creek. Rice Creek flows 28 miles from Clear Lake (Forest Lake) to the

Mississippi River, winding through the Rice Creek Chain of Lakes until it meets the Mississippi at Manomin Park in Fridley. Sometime prior to 1930, portions of Rice Creek were straightened to make way for hay fields and pasture. Later, during World War II, the U.S. Army built its Twin Cities Army Ammunition Plant (TCAAP) on the border of Arden Hills and New Brighton near a section known as the Middle Rice Creek.

When the TCAAP finally closed in 2005, it created an opportunity for Ramsey County to restore the surrounding landscape and for Rice Creek Watershed District to nurse the neglected stream back to good health. In September 2024, EMWREP staff toured the Middle Rice Creek restoration as part of a Watershed Partners event. Read more: <u>Carrying stories around the bend.</u>

Heritage brook trout return to Afton. In October, Trout Brook in Afton welcomed its very own community of heritage brookies, thanks to a multi-year effort to improve water quality and restore aquatic habitat. Led by the South Washington Watershed District, components of this effort have included working with upland landowners to establish grassed waterways in farm fields, plant prairies, and create streamside buffers, and working with Afton Alps and Afton State Park to "re-meander" segments of Trout Brook that were artificially straightened in the early 1900s. Project partners include Minnesota DNR, Great River Greening, and Washington CD.

On October 9, EMWREP collaborated with SWWD staff to plan a fun, hands-on celebration where volunteers and area residents released 2500 fingerling trout into the stream. Read more: Heritage Brook Trout Return to Afton

Brown's Creek restoration underway. Brown's Creek Watershed District is leading a stream restoration project designed to reduce bank erosion and improve habitat for fish along a half-mile stretch of water that flows between McKusick Ave. and the Brown's Creek State Trail in Stillwater. In addition to re-creating the floodplain and meandering channel, the project will also remove buckthorn and restore native vegetation. EMWREP will help to coordinate volunteer planting events and a celebration in 2025: Restoration Work Along Brown's Creek in Stillwater

Will derby ducks sail on a cleaner creek in 2025? The City of Bayport recently restored a 300ft stretch of degraded stream along 3rd Ave. N near Perro Park, in partnership with Middle St Croix WMO and the Washington CD. The goal of the project is to stabilize the streambank, reduce the amount of sediment and phosphorus flowing downstream to the St. Croix River, and improve habitat along Perro Creek. Read more: Will derby ducks sail on a cleaner creek in 2025?

Multimedia Content via print or online

- Relevant blog posts (and newspaper articles) at Angie Hong's eastmetrowater.org
 - Minnesota gains wetlands but not all are created equally (Feb. 8, 2024)
 "Minnesota gained roughly 43,000 acres of wetlands statewide between 2006 and 2020. Wetland health varies greatly across the state, however, and some types of wetlands are more at risk."
 - Shorelines and Fish Tales (March 8, 2024) "Unfortunately, we're seeing more and more people removing the vegetation along their shorelines and it's causing a chain reaction in the aquatic food web that's affecting fish, as well as insects and other wildlife," says Tom Langer, a biologist and riparian permit specialist with the Carnelian-Marine-St. Croix Watershed District.
 - O Brown's Creek takes a few twists and turns for the better (May 13, 2024) "This May, Brown's Creek Watershed District began work on a stream restoration project designed to reduce bank erosion and improve habitat for fish along a half-mile stretch of water that flows between McKusick Ave. and the Brown's Creek State Trail."
 - A rising tide lifts all boats...and roads and houses (June 28, 2024) "In the east metro area, "No-Wake" restrictions are in effect for the St. Croix River and watershed districts are also urging boaters to go slow on local lakes to avoid damaging shorelines with large wakes and waves."
 - <u>Local officials set sail to learn about shorelines and development</u> (July 5, 2024) "This year's workshop focused specifically on St. Croix Riverway Rules, strategies for dealing with sticky issues and variance requests, and better site design for development and redevelopment projects."
 - <u>Lake Living 101</u> (Aug. 13, 2024) "Owning a lake home is the quintessential Minnesota dream, but it also comes with a lot of responsibility. Two of the most common "problem scenarios" for lakeshore owners include creating beaches and installing rock riprap. Learn more about the rules."
 - Celebrating 25 Years of Lake and Stream Restoration Work in the Comfort Lake

 Forest Lake Watershed (Sept 3, 2024) "On September 18, the Comfort Lake
 Forest Lake Watershed District will celebrate its 25th Anniversary, share updates on programming, and announce recipients of the 2024 Watershed Champion Awards."
 - As phosphorus inputs decline, watershed organizations focus their attention on shorelines (Oct. 18, 2024) "A recent report from the Natural Shorelines
 Partnership noted that Minnesota has lost 50% of its natural shorelines over the past 100 years, and continues to lose shoreline habitat at a rate of 1-2% per decade."

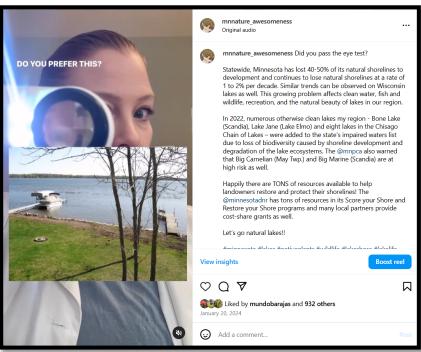
Interpretive signage

In Mahtomedi, Hannah designed an interpretive sign the will be installed at Lost Lake, as part of a shoreline restoration project by Rice Creek Watershed District and Washington Conservation District.



Videos about shoreline and stream restoration shared on @mnnature awesomeness

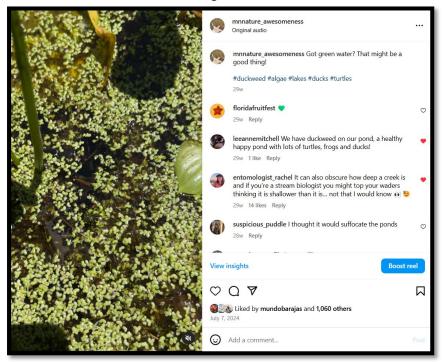
- Good/Bad shoreline comparisons (1-19-24) = 25,400 views
 - 8.5k on TikTok + 16.9k on Instagram



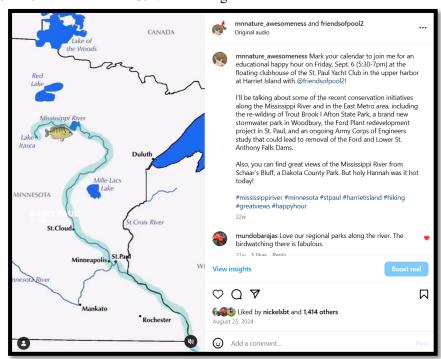
- Brown's Creek restoration begins (5-17-24) = 13,200 views
 - 4.5k on TikTok + 8.7k on Instagram
- Flooding impacts on shorelines (6-26-24) = 13,900 views
 - 1.9k on TikTok + 12k on Instagram



- $\underline{\text{Duckweed}}$ (7-5-24) = 36,200 views
 - 1.5k on TikTok + 34.7k on Instagram



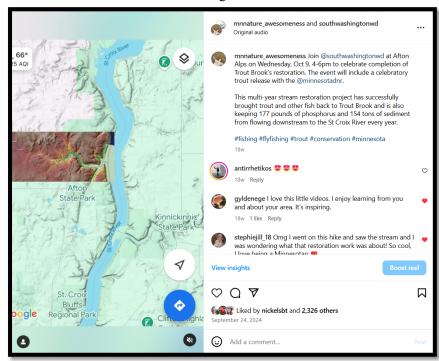
- <u>Public waters</u> (8-13-24) = 10,700 views
 - 2k on TikTok + 8.7k on Instagram
- Stream restoration at Brown's Creek underway (8-21-24) = 16,500 views
 - 5.7k on TikTok + 10.8k on Instagram
- <u>Mississippi River</u> (9-5-24) = 49,800 views
 - o 10.1k on TikTok + 39.7k on Instagram



- Middle Rice Creek restoration (9-12-24) = 86,900 views
 - 30.9k on TikTok + 56k on Instagram



- <u>Trout Brook restoration</u> (9-24-24) = 144,700 views
 - o 54.1k on TikTok + 89.6k on Instagram



- St. Croix River (10-6-24) = 20,700 views
 - 5.4k on TikTok + 15.3k on Instagram
- Heritage brook trout release (10-10-24) = 9400 views
 - o 3k on TikTok + 6.4k on Instagram

Objective 3: Promote conservation development.

Components of this work include:

- 1. Educating and engaging local leaders from cities, townships and counties to adopt MIDS.
- 2. Supporting local communities in natural resources planning to preserve open space, protect high quality and sensitive natural resources, and create/maintain habitat corridors.
- 3. Developing strategies for engaging builders and developers.
- 4. Developing educational materials for new homebuyers, especially those buying property to build or remodel on their own.

2024 Activities:

St. Croix learning series for local leaders – June 24, Aug. 7, Sept. 30

This year, EMWREP expanded its always-popular St. Croix River Workshop on the Water and offered three unique opportunities for community leaders to network and access support to protect water resources in our area. This learning series was designed for city councils, planning commissions, township boards, county commissioners, SWCD and watershed board members, and other local leaders. Additional partner who helped to make these events happen include the Lower St. Croix Watershed Partnership, National Park Service, Minnesota DNR, Wisconsin DNR, Polk County, St. Croix County, Washington County, Chisago SWCD, Isanti SWCD, Washington CD, Carnelian-Marine-St. Croix WD, and Middle St. Croix WMO. A total of 140 local leaders from Minnesota and Wisconsin participated.

Mon., June 24: 16th Annual St. Croix River Workshop on the Water (WOW), aboard the Grand Duchess out of Hudson.

This workshop focused on actions local communities can take to protect their shorelines, as well as strategies to ensure better development and redevelopment projects. Daniel Peterson, Supervisory Park Ranger with the St. Croix National Scenic Riverway was the keynote speaker.



Above: The 16th Annual St. Croix Workshop on the Water focused on actions communities can take to protect shorelines, strategies for dealing with sticky issues and variance requests, and Better Site Design for development and redevelopment projects

Conservation Development Innovation Tour - Wednesday, Aug 7

In August, EMWREP collaborated with the Washington Water Consortium for a driving tour by bus to visit three innovative examples of conservation development and permanent land protection in Marine on St. Croix, Scandia, and May Township. Tour stops included:

- <u>Jackson Meadow</u> a cluster style, conservation development in an upland area of Marine on St. Croix that features 190 acres of protected habitat, minimal impervious surfaces, and a communal constructed wetland that removes up to 95% of pollutants from wastewater.
- <u>TiiGavo</u> a conservation development on Big Marine Lake in Scandia that features a shared community boat dock, raingardens and water quality treatment basins, and preserved natural habitat.
- <u>Kelley Farms</u> 3000+ acres of private land permanently preserved through partnership with Trust for Public Lake, MN DNR and Washington County Land and Water Legacy Program. The county will be purchasing 685 acres adjoining Big Marine Regional Park and the MN DNR has purchased 2,600 acres to operate as a Wildlife Management Area.







Above (left to right): Kristina Smitten (Marine planning commission) gives local leaders a tour of Jackson Meadow; Roger Tomten talks about the design process for the TiiGavo neighborhood in Scandia; Washington County Commissioner Fran Miron talks about future plans for Kelley Farms.

Local Leaders Workshop – Monday, Sept. 30 at Elleholm Barn in Center City **Protecting the St. Croix while enhancing the quality of life in rural areas**

During the final event in our 2024 learning series, presenters shared accomplishments of the Lower St. Croix Watershed Partnership (Barbara Heitkamp), and talked about land use planning for growing communities (Angie Hong), conservation and agricultural easements (Doug Page, Isanti SWCD), enhanced street sweeping (Paula Kalinowski, MPCA), and a pilot incentive program to protect existing habitat on private lands (Aidan Read, CLFLWD). The event was held at Elleholm Barn in Center City, which is located on Little Lake.





Above (left to right): Barbara Heitkamp talks about the Lower St. Croix Watershed Partnership; Jessica Sahu Teli and Angie Hong (EMWREP) and Kaitlin Anderson (Polk Co) greet participants.

Presentations for cities and townships

In 2024, Angie Hong (EMWREP) and Barbara Heitkamp (Lower St. Croix) developed a menu of presentation topics for communities to choose from, including:

- 1. State of the Waters
- 2. Love your lakes without loving them to death
- 3. Planning for development
- 4. Low Impact Development strategies
- 5. Stormwater collection and reuse
- 6. It's economy stupid Comparing short and long term maintenance costs of stormwater infrastructure
- 7. Protecting lakes, rivers and groundwater from chloride pollution
- 8. Reducing water pollution with targeted enhanced street sweeping
- 9. Strategies to engage your citizens

Additionally, we discussed many of these topics with city, county, and watershed staff during EMWREP coordination meetings in November and December.

Presentations included:

- Thu., June 6: Leadership Tomorrow: Greater White Bear Lake Community Foundation
- Thu., Aug. 22: Stillwater Noon Rotary
- Tue., Aug. 27: Valley Branch WD Board Workshop on chlorides
- Thu., Oct 10: Presentation to Middle St. Croix WMO Board
- Tue., Dec. 3: EMWREP presentation to Lake Elmo City Council

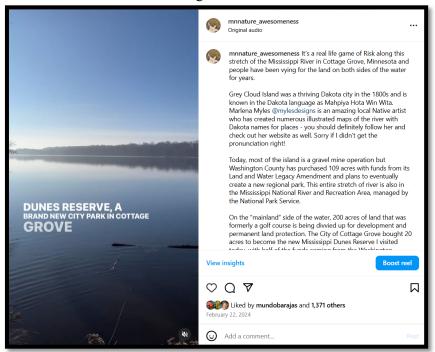
Multimedia content delivered via print or online:

Relevant blog posts (and newspaper articles) at Angie Hong's eastmetrowater.org

- When Development Comes to Town (Jan. 18, 2024) What tools exist to help small towns grow in a way that protects natural resources and maintains a sense of community?
- With eyes set on National Heritage designation, North Woods and Waters continues working to connect people and organizations in the St. Croix Region (June 7, 2024) "This organization is all about developing a collective pride in place and helping our small towns to thrive," says Executive Director Monica Zachay.
- <u>Local officials set sail to learn about shorelines and development</u> (July 5, 2024) "This
 year's workshop focused specifically on St. Croix Riverway Rules, strategies for dealing
 with sticky issues and variance requests, and better site design for development and
 redevelopment projects."

Videos about conservation development shared on @mnnature awesomeness

- Washington County Land and Water Legacy Program (2-12-24) = 8900 views
 - 3.7k on TikTok + 5.2k on Instagram
- <u>Mississippi Dunes</u> (2-23-24) = 37,500 views
 - 4.5k on TikTok + 33k on Instagram



- <u>Conservation development</u> (6-27-24) = 9500 views
 - 2.3k on TikTok + 7.2k on Instagram
- <u>Jackson Meadow</u> (8-7-24) = 126,000 views
 - 20k on TikTok + 106k on Instagram



Objective 4: Minimize stormwater runoff pollution.

Components of this work include:

- 1. Creating and disseminating stormwater education materials to the general public
- 2. Training municipal staff and contractors
- 3. Supporting partners in meeting MS4 permit requirements
- 4. Engaging community residents through the Adopt-a-Drain program
- 5. Utilizing and supporting regional programs such as Watershed Partners

2024 Programs and Activities:

Adopt-a-Drain

The Adopt-a-Drain program engages community residents in helping to prevent stormwater pollution by cleaning leaves, litter and other debris off of storm drains near their homes. Volunteers get reminders via text or email and are asked to report their actions on-line so that cities can track the program's impact. The Adopt-a-Drain program was created by Hamline University's Center for Global Environmental Education on behalf of



Watershed Partners, a metro area collaborative with 60+ partners.

In 2024, EMWREP continued to promote the program through a variety of means, including:

- Participating in Watershed Partners and financially supporting the Adopt-a-Drain
- Publishing articles in local newspapers and city newsletters
- Collaborating with volunteer groups such as Sustainable Stillwater and Center Lakes Lake Association
- Establishing an e-newsletter to provide regular communications with Adopt a Drain volunteers in Chisago and Washington Counties

To date, Minnesotans have adopted **24,990 storm drains**, including 1106 drains in Washington County and 106 drains in Chisago County. Our staff helped to staff the Adopt-a-Drain activity booth at the Minnesota State Fair, where more than 1000 new volunteers signed up to adopt storm drains. Which communities are leading the pack?

- 1. Woodbury 261 drains adopted
- 2. Stillwater 245 drains adopted
- 3. Mahtomedi 169 drains adopted
- 4. Oakdale 93 drains adopted
- 5. Lake Elmo 73 drains adopted
- 6. Forest Lake 44 drains adopted
- 7. Chisago City 43 drains adopted
- 8. Hugo 30 drains adopted
- 9. Lindstrom: 25 drains adopted
- 10. Center City: 20 drains adopted

Stormwater education resources for partners

During 2024, EMWREP delivered monthly emails to partners with a variety of education materials including newsletter articles, social media graphics, and videos to be used in public education activities. We also shared these messages in print and social media communications. Activities completed for each topic are listed on the following pages.

CHLORIDE (SALT)

In January, October and December EMWREP shared information about chloride pollution.

- Resources shared: Social media graphics, <u>Salt Tip Card</u>, MPCA SMART Salting
 Certification Courses, <u>Model policies</u>, <u>ordinances and contracts for winter maintenance</u>,
 Winter Salt Week info, SWWD grit give-away, <u>SMART Salt Assessment tool</u>, <u>Low Salt</u>,
 No Salt MN, Low Salt Design, HOA salt use fact sheet
- Contractor outreach: Also in January, we mailed educational packages to 70 private contractors to share information about SMART Salting best practices and upcoming trainings.
- Events:
 - Tue., Aug. 17: Valley Branch Watershed District Chloride Management Workshop at Baytown Town Hall.
 - Saturday, Oct. 5: Lake Impairment: Salt? What Salt? This event, led by Brown's Creek Watershed District focused on chloride impacts to Long Lake in Stillwater.
- SMART Salt Certification Workshops Oct. 22 and 23



In fall of 2024, EMWREP and the Lower St. Croix Watershed Partnership hosted two workshops associated with the SMART Salt training program:

Oct. 22 in North Branch. For those already certified in Smart Salting Level 1, this refresher provides a closer look at liquids application, conditions, equipment maintenance, brine making and storage. It provides winter maintenance crews a basis to understand benefits, troubleshoot issues, and find opportunities for additional use of liquids.

o Smart Salt Level 1 Certification Workshop:

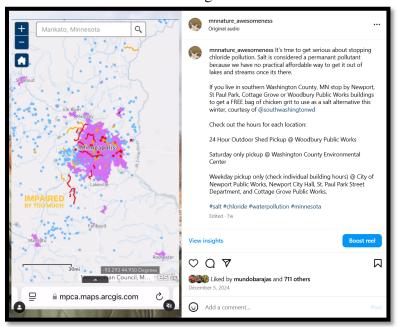
Wednesday, Oct. 23 in Hugo. This class introduces best practices for plowing, de-icing and anti-icing application, storage, and more. Participants learn how to integrate science with practical strategies to save money and minimize their impact on the environment. Participants also earn a five-year Level 1 (individual) certification from the Minnesota Pollution Control Agency.

• Media communications

Staying warm and upright during Minnesota's winters (Dec. 20, 2024) "Twenty-five years later, I'm still wearing the same pair of snow pants and mukluks I bought when working as a seasonal naturalist and I've picked up a few additional tricks for staying warm and upright during Minnesota's winters."

o <u>Chloride impaired water bodies</u> (12-5-24) – 15,900 views

• 6.4k on TikTok + 9.5k on Instagram

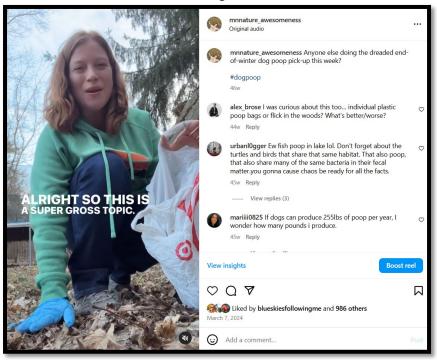


- Salting the ground of your enemies (12-18-24) = 19,800 views
 - 6.2k on TikTok + 13.6k on Instagram

PET WASTE

In March, we shared information about pet waste, including a newsletter article and social media graphics. We also shared a video:

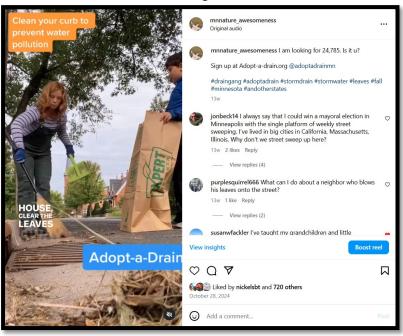
- Pick up dog poop in the spring (3-7-24) = 30,500 views
 - o 8.2k on TikTok + 22.3k on Instagram



ADOPT A DRAIN

In April, September, and October, we shared info about Adopt a Drain. We also collaborated with Watershed Partners to host an appreciation event for storm drain adopters at the Minnesota Twins game on May 4.

- <u>713,495 Pounds of Schmooka and Counting</u> (April 11, 2024) "In most cases, it takes less than five minutes to walk out your front door, grab a snow shovel and wheelbarrow, and scoop up the schmooka along the curb line in front of your home."
- East Metro residents adopt thousands of storm drains to help protect lakes and rivers (Oct. 11, 2024) "The Adopt a Drain program was developed as a fun and unique way to engage community residents in helping to prevent stormwater pollution. As a testament to the program's popularity, Minnesotans have adopted an astounding 24,523 storm drains and report collecting 769,210 lbs of debris, which would have otherwise been washed into lakes, rivers and streams."
- The Science of Leaves (Nov. 21, 2024) "Leaves are the primary source of organic matter in a woodland ecosystem and release essential nutrients like phosphorus and nitrogen as they decompose. In urban and suburban environments, however, fall leaves can also be a major source of stormwater pollution. Studies show street sweeping can reduce phosphorus concentrations in stormwater by up to 80%."
- <u>Adopt a Drain</u> (4-8-24) = 30,400 views
 - o 8.9k on TikTok + 21.5k on Instagram
- Adopt a Drain (10-28-24) = 13,600 views
 - 1.7k on TikTok + 11.9k on Instagram



NO MOW MAY & SLOW MOW SUMMER

In May, we shared information about lawn alternatives and the No Mow May movement. Resources shared included newsletter articles, social media graphics, and upcoming workshops.

EROSION & SEDIMENT CONTROL

In June, we shared information about erosion and sediment control, including impairment info cards and numerous other print resources.

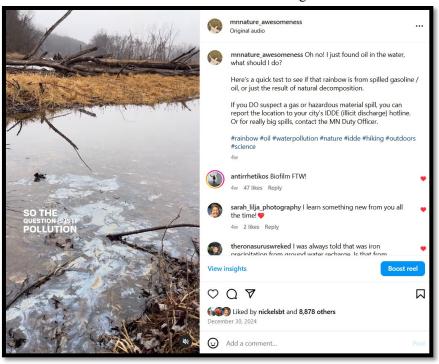
LAWN CARE BEST PRACTICES

In August, we share resources related to lawn care, including videos, social media graphics, and web resources.

ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

In September and November, we shared information about IDDE prevention, including brochures, social media graphics, and videos.

- Is it oil? (12-30-24) = 139,200 views
 - o 25.2k views on TikTok + 114k views on Instagram



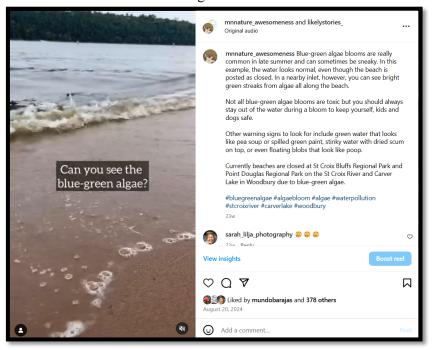
WATER POLLUTION 101

In December, we updated the statistics on our Water Pollution 101 racks cards and shared these with partners. Looking ahead to Jan-March of 2025, Artist Victoria Styrbicki has created poster sized versions of these cards, which are on display at A House UnBuilt in Stillwater as part of a larger artistic collaboration with Brown's Creek Watershed District.

OTHER STORMWATER TOPICS

- In Woodbury, a stormwater park takes shape (July 14, 2024) "Construction is underway at Hasenbank Park in Woodbury, where the South Washington Watershed District and City of Woodbury are combining nature, art, and human engineering to build a one-of-a-kind "Stormwater Park." The goal is to protect Powers Lake from runoff pollution, while also creating a community gathering space with walking trails, public art, and beautifully restored native habitat."
 - o <u>Hassenbank Park</u> (5-29-24) = 22,000 views
 - 6.3k on TikTok + 15.7k on Instagram
 - o Art installation (12-10-24) = 7500 views
 - 1k on TikTok + 6.5k on Instagram

- <u>Blue-green algae</u> (Aug. 20-24) = 15,500 views
 - o 6.8k on TikTok + 8.7k on Instagram



Community Events and Presentations

- Monday, March 11: Presentation to University Women's Group in Oak Park Heights. Angie talked about the State of the Water, PFAS, and wetlands.
- Sun., April 7: House of Prayer Lutheran Church (Oakdale): Barbara gave a presentation about state of the waters in Washington County.
- Tue., Sept. 17: State of the Water. Presentation to Zvago Community in Stillwater.
- Tuesday, Oct. 1: Groundwater & PFOS. Presentation to Stillwater Lions Club
- Tuesday, Oct. 8: HOA Leadership Network event at the Eagan Community Center

ASSESSING BARRIERS TO STORMWATER AND GREEN INFRASTRUCTURE MAINTENANCE IN HOMEOWNERS' ASSOCIATIONS (HOAS) AND DEVELOPING NEW EDUCATION TOOLS

In 2023-24, we received \$20,000 in grant support from the University of Minnesota Water Resources Center (WRC), the Minnesota Stormwater Research Council, and Minnesota Sea Grant and to conduct audience research with HOA board members and property managers in order to learn more about their stormwater knowledge, behaviors, barriers, motivations, and education support needs.

Research and results: Working in partnership with Wilder Foundation, we conducted a survey in fall of 2023 and held two focus group sessions in January of 2024. We received 63 survey responses (6% response rate) and had 12 focus group participants.



Speakers at the HOA Conference included Andrew Coyne, City of Stillwater; Hannah Peterson, WCD AmeriCorps; Cameron Blake, WCD; and Andy Erickson, SAFL.

Responses indicate that HOA board members lack awareness and understanding of the long-term and annual maintenance needs for difference types of stormwater and green infrastructure practices and are unclear on how much to budget for maintenance. In fact, 57% of board members said their HOA budgets \$0 annually for stormwater infrastructure maintenance. In addition, most property managers say they lack the tools to properly support their HOA communities and find it challenging to help their clients understand stormwater infrastructure and its maintenance needs.

HOA board members and property managers said they are most interested in receiving simple, infographic style fact sheets and short, how-to videos. However, survey and focus group responses also suggest that financial concerns will continue to be a major barrier to stormwater and green infrastructure maintenance in HOAs.

New education tools: After completing the research project, AmeriCorps member Hannah Peterson developed a new Stormwater Education Toolkit, which includes 12 one-page fact sheets that cover a range of stormwater and landscape maintenance topics relevant to HOAs. The education package is posted online for partners to download and use. Other HOA resources available online include presentations from a mini conference EMWREP hosted on May 31, the summary report from our 2023-24 research, and a "Working with HOAs Guidebook" developed in 2017: www.mnwcd.org/hoa-stormwater-tools

Next steps: EMWREP has established a new relationship with the HOA Leadership Network (www.hoalnet.com) to share resources with 850+ communities in their network. Hannah attended several meetings in summer/fall of 2024. In 2025, EMWREP will pilot a three-part training series for HOA leaders in partnership with UMN Water Resources Center and MN Sea Grant.



Objective 5: Build social capacity for environmental change and strengthen community connections.

Components of this work include:

- 1. Building and nurturing partnerships with state and local government, non-profit organizations, sportsman groups, and community groups.
- 2. Engaging volunteers through programs such as Minnesota Water Stewards, Master Gardeners, AIS Detectors, Adopt-a-Drain, and Adopt-a-Raingarden.
- 3. Maintaining a robust community presence that utilizes multiple media platforms and communication strategies, including blog and newspaper articles, paper and enewsletters, social media, websites, and community events.
- 4. Conducting audience research to understand knowledge, behaviors, barriers, and opportunities and guide development of effective outreach and engagement programs.

2024 Activities:

Participate in regional education partnerships:

One of the most important strategies utilized by the EMWREP program is to build partnerships and work collaboratively with federal, state, and local government; non-profit organizations; and community groups to educate and engage the public. In addition, Watershed Partners and SWEEP are two formal watershed education partnerships that EMWREP has actively supported for years.

Watershed Partners

Watershed Partners is a coalition of more than seventy public, private and non-profit organizations in the Twin Cities metro area that has existed since 1996. The mission is two-fold:

- To provide and promote collaborative watershed education programs with consistent messages to the general public, local government staff and elected officials; and
- To provide WSP members a place and means to share information, generate ideas, and coordinate and support collaborative watershed education programs.

Watershed Partners holds monthly meetings with guest speakers, oversees the Adopt-a-Drain program and www.CleanWaterMN.org website, and manages the Adopt-a-Drain exhibit space at the Minnesota State Fair. In 2024, EMWREP coordinator Angie Hong continued to serve on the Watershed Partners' steering committee and act as convener for large group meetings.

In addition to its monthly partner meetings, EMWREP helped Watershed Partners to host two in-person events:

- June 12: Mississippi Boat Tour, departing from Watergate Marina in St. Paul. Speakers talked about efforts to block invasive carp in the Mississippi River and the popular "Carp Unlimited" campaign, created by Trout Unlimited to engage urban anglers in the Twin Cities.
- Sept. 11: Middle Rice Creek restoration tour in Arden Hills, led by staff from the Rice Creek Watershed District.

St. Croix Watershed Environmental Education Partnership (SWEEP)

SWEEP is a partnership of environmental education professionals within the St. Croix River watershed whose mission is to inspire leadership in environmental education and stewardship through networking, community engagement, and collaboration throughout the St. Croix River watershed. Angie Hong serves on the SWEEP leadership team. In 2024, EMWREP collaborated with SWEEP to hold a volunteer networking event.

• Mon., Sept 16: Volunteer Networking Event at Marine Village Hall for volunteers and volunteer coordinators. Julie Grecian from JEG Consulting led a break-out session for volunteer coordinators, while Sierra Stukenholtz, Volunteer Coordinator at Wild Rivers Conservancy, led a parallel session for Water Stewards, Master Gardeners, Citizen Advisory Committee members, and other volunteers. There was also a group art project.







Above: During the SWEEP Volunteer summit, volunteers working with EMWREP and other local organization had an opportunity to meet one another and share ideas.

Mentor & engage volunteers

- Water Stewards: The Minnesota Water Steward program is overseen by nonprofit
 Freshwater, in partnership with local government entities. Water Stewards complete 50hours of in-person and on-line training, plus a capstone project, to become certified. Once
 certified, they volunteer 25-hours per year to support watershed and conservation
 initiatives in their local communities. In addition, many of our Water Stewards have
 joined citizen advisory committees or boards at cities, watershed districts, SWCDs, and
 nonprofit organizations in our area.
 - There are currently 20 Water Stewards working in Washington County.
 EMWREP hopes to work with Freshwater to recruit one to two new cohorts of volunteers in late 2025. This would include new volunteers in Chisago and Isanti Counties.
- Adopt-a-Raingarden: The Adopt-a-Raingarden program engages community volunteers to care for raingardens in Stillwater and Oak Park Heights. Volunteers commit to removing weeds, litter, and built-up sediment during the growing season and reporting larger maintenance concerns to staff at Washington Conservation District.
 - EMWREP collaborates with Sustainable Stillwater to keep an up-to-date list of volunteers and garden locations and plan an annual clean-up event. This year's event was held on May 11 and had around 30 volunteer participants.
- **Tree Stewards:** The Minnesota Tree Steward program is designed for people who love trees, enjoy being outdoors, and want to volunteer with their community. Volunteers learn basic tree biology and identification; best practices for planting, mulching,

watering, staking, fertilizing, and trunk protection; developmental pruning of young trees and pruning suckers and sprouts; and common tree disease, pests, and defects. Tree Stewards also commit to completing 25 hours of volunteer work and/or participating in three tree-related volunteer events each year.

- EMWREP has helped several volunteer groups to build gravel bed tree nurseries for community planting projects around the county. Gravel beds can be used to increase the fibrous root volume of bare root seedlings so that planted trees are healthier and more likely to survive. Currently, there are volunteer managed gravel beds at the County Fairground and in Stillwater, Marine and Scandia. EMWREP staff continue to provide staff support to the volunteers managing these projects.
- o In 2025, EMWREP hopes to recruit 25-50 Tree Stewards. During 2024, staff worked to develop program and recruitment materials, establish partnerships with local cities, and identify volunteer team leaders for the program.
- AIS Detectors: Participants complete 6-8 hours of on-line training and attend one full-day, in-person workshop. They learn how to identify invasive species including: Eurasian watermilfoil, hydrilla, starry stonewort, spiny waterflea, rusty crayfish, zebra mussels, quagga mussels, bighead carp, silver carp, round goby, and ruffe. Volunteers received a certificate upon completion of training and are asked to volunteer 25 hours per year.
 - o Partner = University of Minnesota

Youth education

AmeriCorps member Lori Maxfield spent much of her time during the past year helping to support youth watershed programming at South Washington County Schools, in partnership with South Washington Watershed District, Ramsey-Washington Metro Watershed District, and Carpenter Nature Center. Throughout the year, Lori also worked to develop a Community Asset Map that illustrates the different types of partner-led youth education happening in our area.

Featured programs include Volunteer Stream Monitoring (High School), Water Quality Education (6th Grade), Soil Health Education (4th and 5th Grade), Woodbury Elementary Raingardens (4th and 5th grade), SWWD Campus Greening program, and EMWREP non-formal youth education. Check out the <u>Youth Watershed Programming – Community Asset Map</u> to learn more. In 2024, EMWREP staff helped to engage more than 3600 4th, 5th and 6th grade students.

• South Washington Schools: Currently, 6th grade students from Cottage Grove, Lake, and Oltman Middle Schools participate in watershed education programming, led by staff from Carpenter Nature Center and EMWREP. The programming is funded by South Washington Watershed District and Washington County and includes a series of 5 inperson lessons in the classrooms, followed by a field trip to the nature center. The curriculum is hands-on, aligned with state standards, and focused on local watershed and ecosystem issues in and around the schools.

In 2024, Lori Maxfield (AmeriCorps) and Abbey Hauge (Washington CD) provided staff support for this programming. In addition, Lori worked with staff from the Ramsey-Washington Metro Watershed District to rehab a raingarden at Woodbury Elementary and plant trees on site, with saplings grown at the gravel bed nursery at the fairgrounds.

• **SWWD Youth Survey:** In the early spring, we leveraged our existing relationship with 6th grade teachers at Cottage Grove, Lake, and Oltman Middle Schools to conduct a youth watershed survey that assessed students' knowledge, interests, and concerns regarding local watershed resources and issues. A total of 434 students participated and input will be used to help the South Washington Watershed District update its 10-year management plan.

Youth Mentorship Pilot Program: In 2024, Jessica Sahu Teli began planning a new youth mentorship program for rising juniors and seniors at Tartan High School in Oakdale. Over the course of nine in-person sessions, students will learn about different careers in natural resources and get hands-on experience testing soils and water quality, inspecting erosion control features, creating social media education, and more. Ramsey-Washington Metro, South Washington, and Valley Branch Watershed Districts are helping to support this program.

One goal of this initiative is to introduce youth to possible careers in natural resources. A second goal is to develop new relationships with underserved community members in Oakdale, Maplewood and North St. Paul. We also hope to connect students in the program with real-world projects in their neighborhoods, such as helping to plan and install pollinator plantings at Tartan High School. The program will be piloted in June 2025.

- Other youth education EMWREP staff also helped to promote and lead activities at the following events:
 - Fri., May 17: Isanti Children's Water Festival
 - Mon., June 10: Woodbury 4-H Club. Hands-on soil characterization and soil health session
 - Thu., Aug. 8: It's a Bug's Life! Summer camp at Sally Manzara Nature Center in Lake Elmo
 - Wed., Sept 25: Metro Children's Water Festival
 - Thu., Sept 26: Chisago Children's Water Festival







Above (left to right): Tara Kelly, Elissa Thompson, and Lori Maxfield plant a prairie at OH Anderson Elementary in Mahtomedi; Kids look for aquatic invertebrates at Sally Manzara Nature Center; Lake Middle School students visit the St. Croix River.

Presentations and events:

In addition to the numerous community events listed in other sections of this report, EMWREP and Lower St. Croix education staff also helped to plan and facilitate the following programs:

- Well Water Screening Clinics Tuesday, May 21 at the Hardwood Creek Library in Forest Lake and Friday, June 14 at Nessel Town Hall in Chisago County
 - O We collaborated with Minnesota Well Owners' Association and Minnesota Groundwater Association to hold free well water screening clinics for private well owners. During the clinics, water samples were tested for nitrate. All participants received a take-home packet with info about abandoned wells, arsenic, bacteria, nitrate, pesticides, PFAS, and well management and had the opportunity to speak with expert volunteers one-on-one.
- Other events
 - APRIL
 - Sat., April 13: Maker's Market at Cottage Grove Ravine Regional Park

- Sat., April 20: Mahtomedi RITE of Spring at Wildwood Elementary
- Mon, April 22: Green Step Earth Day Expo at Rush City High School
- Wed, April 26: Arbor Day Celebration in the Clayton Anderson Family Memorial Nature Park, North Branch
- Sat., April 27th: EarthFest 2024 at Wild River State Park
- Sat., April 27: Valley Eco Fair at Pioneer Park in Stillwater

o MAY

■ Sat., May 11: St. Paul Park Art & Garden event. Lori Maxfield coordinated free soil testing and info about landscaping for clean water.

o JULY

- Tue., July 9 4th Annual Boat Show and Author Talk in Marine on St. Croix
- Sat., July 13 A Walk in the Woods at Sunfish Lake Park, Lake Elmo
- July 31 Aug. 4: Washington County Fair

o AUGUST

- Sun., Aug. 4: Walk and talk event at Franconia Sculpture Park
- Thu., Aug. 8: Author talk at Chisago Lakes Library
- Aug. 22 Sept 2: Minnesota State Fair

SEPTEMBER

- Fri., Sept 6: Friends of Pool 2 presentation at the St. Paul Yacht Club
- Sat., Sept 7: Secrets of the Park. Campfire talk and guided hike at Wild River State Park
- Sat., Sept. 7: Linwood Days
- Wed., Sept 18: Comfort Lake Forest Lake Watershed District State of the Watershed and 25th Anniversary Banquet in Forest Lake
- Sat., Sept. 21: Brown's Creek Watershed District Community Event and Bird Festival at Brown's Creek Park in Stillwater
- Sat., Sept. 21: Hike with the Author at Belwin Conservancy's Oxbow Trails in Afton

OCTOBER

- Thu., Oct. 10: Leadership in the Valley, Agriculture & Environment Day in Bayport
- Tue., Oct. 22: Lakeview Hospital Green Week in Stillwater
- Oct. 29-31: BWSR Academy at Cragun's in Brainerd. Barbara led a workshop about graphic design and Angie led a workshop about writing.

NOVEMBER

- Thu., Nov. 7 (6-8pm): Exhibition Opening Connecting at the Confluence: Photographs of natural places & community connections in the South Washington Watershed District, by Sarah Lilja, 2024 Artist in Residence.
- Thu., Nov. 21: Ramsey-Washington Metro WD 2024 Recognition Dinner at Keller Golf Course in Maplewood

o DECEMBER

■ **Dec. 4 – 6: Minnesota Watersheds Annual Conference** at Grandview Lodge, Nisswa. Angie Hong was the Keynote speaker and talked about the value of watershed education. Hannah and Angie also led a presentation about EMWREP's work with HOAs.

Collaborate with artists to share watershed and conservation stories

Likely Stories - A Photographic Journey thru Climate Adaptations in the St. Croix Watershed

How might artists help us to share stories about our work? In 2024-25, we are collaborating with a group of local photographers to document climate change and adaptation in the St. Croix River watershed. "Likely Stories" will feature photography from Cynthia Dickinson, Alice O'Brien Berquist, Matt Spector, Thomas Corcoran, Pamela Sherlock, Sarah Lilja, and Tina Faye, and Sandy Swanson, as well as educational videos by Angie. The project is supported by the St. Croix Watershed Research Station, Science Museum of Minnesota,



Photo by Cynthia Dickinson

Wild Rivers Conservancy, and St. Croix 360, with additional sponsorships by Zenfolio and DXO. Artwork and photography will be shared on web and social media, as well as at gallery events.

Examples of climate stories and images that may be featured in this project include:

- Black ash swamps and tamarack "ghost forests"
- Future changes at the Allen S. King power plant
- Conservation farming
- Community raingardens
- Housing developments conventional and conservation design
- Lakes, streams, and aquatic habitat from clear water to algae blooms

Follow the project online as it develops – website and Instagram.

Connecting at the Confluence: Photographs of natural places & community connections in the South Washington Watershed District Nov. 5 – Dec. 5 at Carpenter Nature Center

In 2024, South Washington Watershed District hosted photographer Sarah Lilja as an artist in residence. Sarah spent the year capturing images of people, places, and projects in the watershed. EMWREP staff helped to publicize the project and connect Sarah with people and projects. Learn more about this project: eastmetrowater.org/2024/11/03/connecting-at-the-confluence











Above: Images ©Sarah Lilja, http://sarahlilja.photography. (Left to right) Powers Lake, Woodbury; Black-eyed susan at Afton State Park; Prescribed burn at Glacial Valley Park; Leaf on water at Colby Lake, Woodbury; Winter at Wilmes Lake, Woodbury.

Provide stakeholder engagement support for partner plan updates and implementation In 2024, EMWREP helped to support stakeholder engagement for Middle St. Croix WMO, South Washington WD, Brown's Creek WD, and Valley Branch WD as they worked to develop their new 10-year watershed management plans. Activities included:

- Helping to promote public input meetings
- Providing recommendations for survey questions (Brown's Creek WD, Middle St. Croix WMO and Valley Branch WD)
- Conducting a targeted survey of 476 riverway landowners in the Middle St. Croix WMO
- Conducting surveys for the South Washington WD the adult survey had 145 responses and the youth survey had 434 responses

Aquatic Invasive Species (AIS) education

In 2024, EMWREP supported Chisago and Washington County's AIS education programs through the development of new print materials, and by sharing information in print and online newsletters, as well as our social media platforms. In addition, Washington County also supported the 2024 AIS Series, 'How Well Do You Know MN?,' which was led by MN Lakes and Rivers Advocates, in partnership with Producer Erika Gilsdorf: AIS 2024 Outreach Campaign Results.pptx

Additional AIS education activities included:

- Developed and distributed two new education pieces to lake associations.
 - o Hiring a contractor to remove your boat, dock, or lift? Flyer Postcard
- Delivered monthly emails 6x per year to 161 lake association members on our East Metro Lakes e-newsletter list. Members represent ~30 lakes in Chisago, Ramsey and Washington Counties.
- Developed an AIS overview presentation for Square Lake Association.
- Shared information about AIS prevention and new zebra mussel infestations.
 - Avoid spreading AIS during this year's fishing season (May 9, 2024) "Currently, only 8% of the lakes in Minnesota have invasive species present and we need everyone's help to keep it that way."
 - O Zebra mussels found in Big Carnelian Lake (Sept 13, 2024) "Fourteen new zebra mussel infestations were discovered in Minnesota in 2024, including Big Carnelian Lake in northern Washington County. While news of a new zebra mussel infestation is discouraging, it is important to remember that 96% of lakes in Minnesota do NOT have zebra mussels and can still be protected from future infestations if lakeshore landowners, contractors, boaters, and anglers commit to taking action."
 - o Zebra mussels (9-9-24) = 64,500 views
 - 44.8k on TikTok + 19.7k on Instagram

Media and communications

Print Communications

Newspaper articles: Angie Hong has published a weekly column for the Valley Life – Stillwater Gazette since 2006. The articles are posted on-line at www.eastmetrowater.org. Her column is featured monthly in the Forest Lake Times and is also frequently published in the Scandia Country Messenger, Cottage Grove Journal, Forest Lake and St. Croix Lowdowns, White Bear Press, and the St. Croix 360 online news site.

EMWREP also provides content for city, watershed, and WCD newsletters and helped to develop numerous targeted mailings for partners in 2024.

Online Communications

EMWREP uses a variety of online communication platforms to educate and engage with the public, including websites, social media, webinars, story maps, and a blog site. Staff also create content, including photos, events, articles, and videos for partners to share on their platforms.

Websites: EMWREP uses the following websites to share education and information:

- Washington Conservation District: www.mnwcd.org
 - o <u>/events</u> event info and registration
 - o <u>/emwrep</u> annual reports, plans, and downloadable print materials
 - o /planting-for-clean-water resources for planting projects
- East Metro Water: https://eastmetrowater.org Tips and tales on keeping water clean
- Blue Thumb Planting for Clean Water: www.bluethumb.org
 - o Raingardens, native plants, shoreline buffers, and Lawns to Legumes
- Clean Water Minnesota: <u>www.cleanwatermn.org</u>
 - Watershed Partners produces high quality photos and articles for partners to use in their communications. Blog stories highlight actions that Minnesotans are taking to protect water.

Social Media Accounts:

Content is also shared on the following social media platforms:

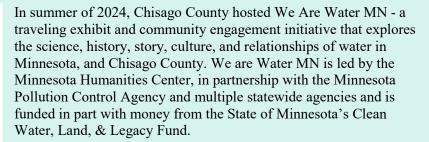
- TikTok @mnnature awesomeness 110,500 followers
- Instagram @wcd mn 1,073 followers; @mnnature awesomeness 37,700 followers
- Facebook @mnwcd 1,400 followers
- East Metro Water blog www.eastmetrowater.org 2554 subscribers
- YouTube Washington Conservation District 150 subscribers; @mnnature 396 subscribers

During 2024, EMWREP produced 86 short videos for TikTok and Instagram. The five most popular videos this past year were:

- Middle Rice Creek restoration (9-12-24) = 86,900 views
- Minnesota milkweeds (7-8-24) = 120,200 views
- <u>Jackson Meadow</u> (8-7-24) = 126,000 views
- Is it oil? (12-30-24) = 139,200 views
- Trout Brook restoration (9-24-24) = 144,700 views

Chisago County hosts "We Are Water Minnesota"







Through EMWREP, Barbara Heitkamp helped to develop Chisago County's application to host the exhibit and also served on the planning team. In this capacity, Barbara helped to identify people and stories to share in the exhibit, planned and executed events, and promoted the We Are Water exhibit. Events included:

- Main Exhibit at the North Branch Area Library
- Indoor Exhibit Displays at the Chisago County History Center
- Outdoor Exhibit at Lindström Memorial Park

Opening Ceremonies:

- North Branch Area Library | June 20, 4:30 6:30 PM
- Chisago County History Center | June 21, 2:00 4:00 PM



Events:

- Nitrate Testing Clinic | June 14 | Nessel Town Hall
- 4-H Water Watchers | June 21 | Community Garden, North Branch
- Water Storytelling | July 16 | North Branch Library
- Kids Water Poetry Contest
- Art + Water Bar | July 17 | Uncommon Loon, Chisago City
- Storytelling, Songs & Art | July 26 | Hallberg Center, Wyoming
- St. Croix River Paddle | July 30 | Taylors Falls Lions Club Park
- Book Reading | August 8 | North Branch Area Library

APPENDIX A EMWREP PROGRAM BUDGET

Staff Support and Overhead Expenses	Materials	Total
\$175,598.07	\$13,000	\$188,598.07

MEMBERSHIP STRUCTURE AND	FUNDING CONTRIBUTIONS
South Washington Watershed District	\$26,530.23
Valley Branch Watershed District	\$20,481.33
Browns Creek Watershed District	\$20,481.33
Comfort Lake – Forest Lake Watershed District	\$20,481.33
Carnelian-Marine-St. Croix Watershed District	\$13,477.35
Ramsey-Washington Metro Watershed District	\$13,477.35
Rice Creek Watershed District	\$3,183.63
Washington County	\$13,583.48
Middle St. Croix Watershed Management Organization	\$6,685.62
City of Cottage Grove	\$2,865.26
City of Forest Lake	\$2,865.26
City of Lake Elmo	\$2,865.26
City of Hugo	\$2,865.26
City of Oakdale	\$2,865.26
City of Stillwater	\$2,865.26
City of Woodbury	\$2,865.26
City of Afton	\$742.85
City of Bayport	\$742.85
City of Dellwood	\$742.85
City of Grant	\$742.85
City of Newport	\$742.85
City of Oak Park Heights	\$742.85
City of St. Paul Park	\$742.85
West Lakeland Township	\$742.85
City of Willernie	\$742.85
City of Wyoming	\$742.85
Chisago Soil and Water Conservation District	\$6,685.62
Chisago Lakes Improvement District	\$6,685.62
Chisago County	\$6,685.62
Isanti County	\$1,337.12
Isanti Soil and Water Conservation District	\$1,337.12
TOTAL	\$188,598.07

Appendix C Local Articles

American

Salmon River NEW YORK

Okefenokee Swamp GEORGIA/FLORIDA

East Carson River CALIFORNIA

January/February 2025 VOLUME 27, NUMBER 1

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Page 38

Genetically Distinct Heritage Brook Trout Return to Restored Minnesota Streams

Story and photos by Hugh Gabriel



hen a Minnesota fish hatchery was hit by a disease outbreak in 2015, most would have seen it as a major setback. Instead, the Minnesota Department of Natural Resources (DNR) found an opportunity to transform the way the agency approached trout stocking. Data from research in the southeastern part of the state released that same year had seen evidence of a "heritage" strain of native brook trout, genetically distinct from the East Coast-sourced brook trout the DNR had been stocking for decades.

The DNR restarted its hatchery operations with spawn from those heritage brook trout, knowing that these heritage trout had evolved to thrive in the region's cold, winding creeks, which are within Minnesota's part of the Driftless Area, a region that escaped gla-

ciation in the last ice age and is thus largely free of the rocky glacial drift that filled valleys elsewhere in the Midwest. Taking inspiration from the unique home range of these brookies, the DNR dubbed the heritage trout as the "driftless strain."

Almost 10 years later, the DNR is reintroducing driftless brook trout across the state's Driftless Area, with releases at 14 streams in 2023, and most recently at Trout Brook, in October of 2024. For decades, Trout Brook, a tributary of the Saint Croix River, wasn't home to any trout, let alone the brook trout that gave the creek its name. Sedimentation and agricultural runoff, exacerbated by the artificial straightening of Trout Brook by a local ski resort, turned a once-vibrant riparian corridor into little more than a drainage ditch.

So, when brook trout were reintroduced to Trout Brook last October, it was cause for celebration, not just for 2,500 finger-length fish, but for the web of partners that spent 15 years turning Trout Brook into a trout haven. The effort was coordinated by the South Washington County Watershed District; and collaborators included Minnesota's Clean Water Council, which matched local funding, the Afton Alps ski resort, which agreed to a conservation easement along its section of the stream corridor, and local contractors who used heavy machinery to rebuild meanders in the creek. Digging through layers of sediment, they found the old rocky streambed buried like an archaeological treasure.

Tony Randazzo, restoration specialist with the South Washington County Watershed District, oversaw efforts to plant native vegetation along the banks and root out invasive species, such as reed canary grass, making sure that the impacts of the restoration went beyond trout habitat. Flood management and

water retention are "things this [restoration] really benefits," Randazzo says. "Starting with a channelized stream, now there's actually a floodplain for water to disperse."

Randazzo, along with a couple of dozen project managers, funders, and interested community members, helped to release a bucket of tiny driftless brook trout into the newly restored stream on a warm October evening. The trout were the same silver-gray tones as the stream stones they quickly hid behind, with tiny orange spots along their flanks the only hint of the sunset-like coloration they'll adopt as adults. They look just like brook trout that could be found in any number of streams across the East, or farther west where they are an introduced species. But within their genetic code, these driftless brook trout have hidden strengths: they evolved here, alongside the insects, diseases, and predators intertwined with their life cycle. Darting under the shadows of native grasses and carefully placed rocks, the driftless brook trout were right at home.

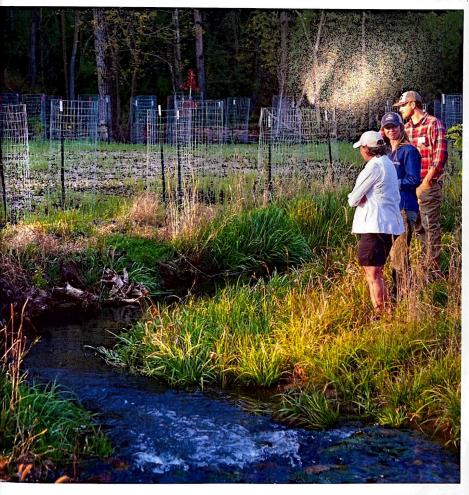


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The nitty gritty new way the east metro is trying to keep winter road salt out of waterways

Alex Jokich KSTP

Updated: December 6, 2024 - 7:10 PM Published: December 6, 2024 - 5:57 PM



The nitty gritty new way the east metro is trying to keep winter road salt out of waterways

The next time it snows, grab some chicken grit.

The South Washington Watershed District is providing free 25-pound bags as part of a pilot program that launched this week.

The goal is to reduce the amount of salt used on sidewalks, driveways and roads.

"Unfortunately, salt contains a lot of chloride. With the snow melt in the spring and summer, chloride runs into our bodies of water and causes pollution, which can be really negative for fish and other aquatic life," said Abby Tekiela, water resources program coordinator at the South Washington Watershed District. "Chloride pollution can also impact our groundwater. It affects the taste and the quality of the water for your health."

The South Washington Watershed District estimates that 445,000 tons of salt are spread on Minnesota roads every year.

A study by the University of Minnesota found that 78% of salt used for winter maintenance in the Twin Cities makes its way to groundwater or remains in the local lakes and wetlands, according to the Minnesota Pollution Control Agency.

"Unfortunately, chloride will generally collect in the water, and there's not really a solid way to get it out, so once it's in, it's kind of in," Tekiela said. "So that's our mission is to make water the priority and protect it."

In the east metro, drinking water is already a major concern due to **PFAS** contamination by 3M.

RELATED: PFAS in drinking water: MPCA says forever chemicals are in 22 water systems, in 17 cities

The South Washington Watershed District bought about 500 bags of chicken grit, to provide to residents as a salt-free alternative this winter.

The bags are available for free at **six locations in Washington County**.

So what exactly is chicken grit? It can be made of anything from ground oyster shells to crushed granite. It is normally given to chickens to help them digest food.

In this case though, it is used for traction.

Residents can spread the chicken grit on slippery sidewalks or driveways.

"While salt is a chemical reaction making the ice melt, grit is instead creating traction," Tekiela said.

The chicken grit being given out by the South Washington Watershed District is made up of crushed quartzite.

Tekiela said it is safe for pets.

"It's basically like a gravel road surface, so if you are comfortable with your pet walking on a gravel road, they can be safe to walk on this surface as well."

Tekiela said it can also be used in colder temperatures, unlike salts that chemically do not work once the ground has reached 15°F.

The grit is also reusable. It can be swept up and moved to a new location or placed back in the bag for future use.

Just two days after the pilot program was announced, the supply of chicken grit at the Woodbury Public Works location was nearly half-gone.

"If the demand's high enough, we're going to reorder, and there will be more for folks to grab," Tekiela said.

For Related Stories: <u>Ice Safety</u> <u>East Metro</u> <u>Alex Jokich</u> <u>Snow</u>

Recommended for You:



Former Lutsen employee says resort owner changed his timeline the night of fire



Minnesota Department of Health reports highest number of whooping cough cases in more than a decade



2 charged in large-scale animal abuse case in Beltrami County



Expect more summer concerts with opening of amphitheater in Shakopee this summer; Live Nation selected as venue partner

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Appendix D	Biennial Solicitation for Professional Services



South Washington Watershed District 2302 Tower Drive Woodbury MN, 55125 Request for Professional Services

The South Washington Watershed District uses outside consultants to provide professional services in the following areas:

- 1) Engineering
- 2) Legal
- 3) Financial Accounting

The South Washington Watershed District (SWWD) Board is requesting any firm interested in providing services to the SWWD submit a letter of interest, a list of related work/projects/clients, a list of key personal and their qualifications, and a current fee schedule. Information should be limited to four (4) pages total. The SWWD is required to request proposals for professional services every two years. Those firms selected will be placed in a pool of professional service consultants for calendar years 2024-2025.

Information must be submitted no later than 3:00 p.m. Thursday November 16, 2023. *Email submittal is preferred.*

South Washington Watershed District Attn: Matt Moore, Administrator 2302 Tower Drive Woodbury, MN 55125

Ph: 651.714.3729

matt.moore@woodburymn.gov

Dated this 18th day of October, 2023. South Washington Watershed District

Matt Moore, Administrator

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Memo

To: SWWD Board of Managers

From: Matt Moore. SWWD Administrator

CC:

Date: December 7, 2023

Re: 2024-2025 Professional Services

*** Please note in an interest of saving paper we are not providing copies of the consultant information, if you would like this information please contact the SWWD office ***

The SWWD received 13 responses for engineering services, 1 legal response and 2 financial responses. There are 10 firms in the engineering pool that are returning responses.

Engineering:

- 1) Barr Engineering
- 2) Consor
- 3) Geosyntech
- 4) HDR Engineering Inc.
- 5) Houston Engineering Inc.
- 6) HR Green, Inc.
- 7) Inter-Fluve
- 8) ISG
- 9) Kimley-Horn and Associates, Inc.
- 10) Moore Engineering
- 11)SRF Consulting Group
- 12) Stantec Consulting Services
- 13) Young Environmental

Other:

1) Sunde Land Surveying

Legal

1) Hellmuth & Johnson Legal-Jack Clinton, P.A.

Financial

- 1) Abdo
- 2) Redpath and Company

The Board could choose one of the following processes to establish engineering services for the 2024-2025 calendar years.

- 1) Place all responders in the pool and delegate work on a project by project basis.
- 2) Select a preferred vendor list using the information we have or request additional information.
- 3) Generate a short list from the twelve responders and conduct interviews to select one or multiple firms.
- 4) Other options

Each engineering firm has ample qualifications, personnel and experience in the types of watershed projects the SWWD is completing. Billing rates average \$275/hour for Principals, \$216/hour for Professional Engineers, \$177/hour for Scientists and \$136/hour for Technicians.

Requested Board Action

- The Board Sub-Committee recommendations:
 - Approval of 2024-2025 engineering services pool to include all respondents, providing a wide range of capabilities to address upcoming SWWD projects.
 - Approval of 2024-2025 legal services with Mr. Jack Clinton, Hellmuth & Johnson.
 - Approval of 2024-2025 financial services with Redpath and Company.
 - Approval of the 2024 and 2024 financial audits with Abdo.