



2021 Education Plan



Members of the East Metro Water Resource Education Program:

Brown's Creek Watershed • Carnelian-Marine-St. Croix Watershed •
Comfort Lake-Forest Lake Watershed • Bayport • Cottage Grove • Dellwood • Forest Lake
Grant • Hugo • 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 • Willernie • West Lakeland
Woodbury • Washington Conservation District • Washington County

**East Metro Water Resource Education Program
2021 Education Plan**

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About the East Metro Water Resource Education Program

Background: The East Metro Water Resource Education Program (EMWREP) is a partnership hosted by Washington Conservation District that was formed in 2006 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 that will help to protect and improve the health of these water resources.

Over the past 15 years, the EMWREP program has grown from seven local government partners to 25. In 2021, EMWREP will expand further to serve portions of Anoka, Chisago, Isanti and Pine Counties and support implementation of the Lower St. Croix “One Watershed” Plan.

Partnership Structure:

In 2020, EMWREP partners included:

- Washington Conservation District (host)
- Washington County
- Watershed management organizations: Brown’s Creek, Carnelian-Marine-St. Croix, Comfort-Lake Forest Lake, Rice Creek, Ramsey-Washington Metro, South Washington, and Valley Branch Watershed Districts, and the Middle St. Croix Watershed Management Organization
- Cities and townships: 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

Partners jointly fund the program based on a set formula, with fees determined by population (cities) or taxable market value (watershed organizations). 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.

In 2021, EMWREP will expand to serve portions of Anoka, Chisago, Isanti and Pine Counties in order to help implement the St. Croix Comprehensive Watershed Management Plan. Watershed based implementation funds from the Minnesota Board of Water and Soil Resources (BWSR) will be used to hire additional staff. In addition, local partners in the northern counties will be invited to join the EMWREP partnership.

EMWREP’s program coordinator – Angie Hong - communicates regularly with partner staff, council members and board members; prepares an annual report detailing program activities; and provides data for partners’ MS4 Permit reports. EMWREP plans and reports are available on-line at www.mnwcd.org/emwrep.

Coordination and collaboration: The EMWREP partnership helps to strengthen relationships between member entities and allows for better coordination and less overlap in the management of local water resources.

EMWREP staff 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. In addition program staff regularly collaborate with nonprofit and citizen-led groups in the Twin Cities and Lower St. Croix regions.

2021 Expansion of EMWREP to Support Implementation of the Lower St. Croix Comprehensive Watershed Management Plan (CWMP)

Background: After two years of planning, a Lower St. Croix 10-Year Comprehensive Watershed Management Plan (CWMP) was approved by the Minnesota Board of Water and Soil Resources on Oct. 28, 2020. The planning process brought together 16 local government partners in Anoka, Chisago, Isanti, Pine and Washington Counties, eight of whom are currently EMWREP partners. The state will provide \$1.2 million over the next two years to begin implementing priority projects and programs outlined in the plan.

The Lower St. Croix Watershed contains 915 square miles of land with 127 lakes, over 1,000 miles of rivers and streams, and approximately 152,000 acres of wetlands. The St. Croix is a National Wild and Scenic River and a major tributary to the Mississippi River. The over-arching goal of the CWMP is to protect and improve the St. Croix River, groundwater, lakes, streams, rivers, wetlands, and upland habitat in order to sustain healthy ecosystems, recreation, public health, tourism, agriculture, the economy, and quality of life.

During the Lower St. Croix “One Watershed” planning process, partners collected input from more than 700 stakeholders, including 440 farmers and 160 community leaders at cities, townships and community organizations. The group also utilized a 32-member advisory committee, comprised of expert staff from local and state agencies, including Board of Water and Soil Resources, Department of Health, Department of Natural Resources, Pollution Control Agency, Metropolitan Council, Department of Agriculture, and the participating counties, watershed management organizations, and soil and water conservation districts.

During workshops, interviews, and surveys, several key themes emerged. Stakeholders expressed support for locally-led watershed management and emphasized the importance of collaboration across levels of government and with the public. People consider the St. Croix River to be the highest priority regional water resource, but also value lakes for recreation and habitat. They expressed a strong desire to protect existing high quality natural resources, and worried about the impacts of runoff pollution (especially from agricultural areas), groundwater pollution, and aquatic invasive species.

Key actions outlined in the Lower St. Croix watershed plan include:

- 1) Hiring staff and/or contractors to work with agricultural producers;
- 2) Providing funding for conservation farming projects and practices;
- 3) Expanding the East Metro Water Resource Education Program to serve Anoka, Chisago, Isanti, and Pine Counties;
- 4) Providing funding for water protection projects in urban areas;
- 5) Creating and restoring 1000 acres of wetlands in priority locations;
- 6) Protecting 1000 acres of critical habitat; and
- 7) Using diagnostic monitoring, computer modeling, field investigations, and cost benefit analyses to identify the best value projects for implementation.

“One Watershed, One Plan” is a statewide initiative led by Minnesota Board of Water and Soil Resources to align local and state efforts in order to create regional watershed management plans that contain prioritized, targeted, and measurable strategies to protect and restore Minnesota’s waterways.

To access the plan, view an interactive map of the watershed, and learn more about the planning process, visit: www.lsc1w1p.org.

Next Steps: In 2021-22, Lower St. Croix CWMP partners plan to use \$125,000 in state funding to expand the existing EMWREP program to serve the entire Lower St. Croix Watershed.

New funding will be used to hire a second full-time staff educator and seek additional education support from the Anoka Conservation District. Approximately 80% of the state-funded staff time will be used to develop, distribute and implement outreach programs that result in behavioral change for water quality benefits; 10% will be focused on AIS prevention outreach and education; and 10% will be spent on engaging willing landowners to install best management practices such as raingardens and native shoreline practices. In partnership with existing EMWREP staff, the program will also provide education for local decision-makers to encourage adoption of MIDS and shoreline buffer protections rules.

In addition, we will invite counties and MS4 cities in the northern planning region to join EMWREP as funding partners in 2021. This will allow EMWREP to provide the full range of educational services throughout the Lower St. Croix watershed.

PUBLIC EDUCATION AND ENGAGEMENT

Audience: General Public, Urban and Rural Landowners, Youth

Program Goals:

1. Educate the public about nonpoint source water pollution, groundwater conservation, and basic watershed ecology and management.
2. Build partnerships with state and local government, non-profit organizations, and community groups.
3. Engage citizen volunteers to help conduct education and outreach.
4. Motivate urban and rural landowners to practice behaviors that protect water resources.
5. Train and assist urban and rural residents to complete projects on their land that reduce runoff pollution, conserve groundwater, and increase infiltration.
6. Support EMWREP partners in meeting MS4 Stormwater Permit public education and public engagement requirements.

Educational Objectives:

Citizens will learn:

1. That nonpoint source water pollution comes from a variety of land uses - residential, commercial, and agricultural.
2. That common pollutants impacting surface and groundwater resources in the east metro area include phosphorus, sediment, nitrates, *E. coli*, chloride, and mercury.
3. That a watershed includes all of the land draining to a lake, stream or river, and that Watershed Districts and Watershed Management Organizations are special-purpose local units of government charged with managing the resources of a given watershed to prevent flooding and protect water quality.
4. That surface and groundwater resources interact.
5. That area residents can help to prevent nonpoint source water pollution through a variety of behaviors, including raking leaves and grass clippings out of the street, using less fertilizers and chemicals on lawns and gardens, covering bare soil during landscaping and construction, picking up pet poop, replacing failing septic systems, using less salt for winter maintenance and water softening, disposing of household waste properly, and using less electricity.
6. That landowners can help to reduce runoff pollution, conserve groundwater, and increase infiltration by installing best management practices such as habitat plantings, raingardens, and shoreline plantings; repairing erosion; and managing drainage around homes, farms, and commercial buildings.



PUBLIC EDUCATION AND ENGAGEMENT: STRATEGIES & ACTIVITIES

1. MS4 Stormwater Education Support for MS4 Permit Compliance

The new MS4 General Permit, issued in November of 2020, requires permittees to educate the public about illicit discharge detection and elimination (IDDE), pet waste, and winter salt and deicing materials. In addition, permit holders must identify two additional stormwater education priorities within their communities. The new permit also requires at least one opportunity for public input on the stormwater program each year and one public participation activity.

To support partners in meeting these requirements; EMWREP will continue to conduct educational programs and activities throughout the year and will also provide partners with newsletter articles, social media graphics, and fact sheets that can be distributed to the public.

At the end of each calendar year, EMWREP will prepare an annual report that summarizes education activities throughout the year and also evaluates the effectiveness of outreach efforts.

Stormwater related priorities for EMWREP (partners can choose different priorities for themselves if needed)

1. Reducing stormwater runoff through landscape changes to commercial, residential, and public properties (ie. Installing raingardens or converting turf to native plantings)
 - May include public projects, completed with support from community residents, or landowner-led projects, completed with encouragement and/or support from EMWREP partners.
2. Encouraging residents to keep leaves and grass clippings out of roadways, ditches, and drainage pathways in order to reduce nutrient inputs to stormwater runoff
 - May include promotion of the Adopt a Drain program.

2021 Calendar of Public Education messaging

EMWREP will provide partners with a variety of education materials including newsletter articles, social media graphics, and videos to be used in public education activities. In addition, EMWREP will share these messages in print and social media communications.

- Jan./Feb.
 - Reminder about SMART salting practices
- March
 - Reminder to collect and dispose of pet waste safely (timed to coincide with snow melt)
- March/April/May
 - Promotion for workshops and site visits to initiate residential landscape projects
 - Promotion of Adopt a Drain (could be timed to coincide with Earth Day events)
- June/July/Aug
 - Information about lawn care best practices, including water conservation
 - Reminder to keep grass clippings out of streets and drainage pathways
 - Information about small-scale construction best practices
 - Potential IDDE messages: proper disposal of concrete washout; best practices for car washing
- Sept.
 - Potential IDDE message: proper draining of swimming pools and hot tubs
 - Reminder to collect and dispose of pet waste properly

- Oct.
 - Reminder to rake leaves out of street & not dump into ditches, ravines or wetlands
 - Promotion of Adopt a Drain
- Nov.
 - Potential IDDE messaging: waste disposal (general); proper disposal of carpet cleaning wastewater
- Dec.
 - Information about SMART salting

Public Participation and Involvement

- EMWREP partners should provide an opportunity, either in-person or virtually, for community members to provide input and feedback about the stormwater education program. A few potential ways to meet this requirement include:
 - Posting the SWPPP online with a short, easy-to-understand summary, and a link to provide feedback via email or a comment form. Share the website address via newsletter, email or social media post.
 - Providing an opportunity for public to comment on the SWPPP at a city council or watershed district board meeting.
 - Creating a short survey to solicit feedback on a community stormwater issue or to learn more about residents’ concerns.
- EMWREP can also help partners to conduct additional public involvement activities, such as:
 - Promoting the Adopt a Drain program
 - Promoting a partner-led community clean-up event or household waste collection day
 - Conducting workshops and webinars about residential landscaping

2. Volunteer engagement:

Minnesota Water Stewards
20 Stewards certified in Washington County 3 new stewards enrolled in 2021

EMWREP has participated in the Minnesota Water Stewards program since 2018 and has certified 20 volunteers over the past three years. There are three new stewards enrolled for 2021.

Water stewards participate in 50-hours of in-person and on-line training and complete a capstone project to become certified. Once certified, stewards volunteer 50-hours during their first year of service and 25-hours per year afterwards to remain in the program.

Some of the many volunteer projects led by water stewards include:

- Organizing raingarden clean-up events
- Joining watershed district CACs
- Going door-to-door in their neighborhoods to promote Adopt-a-Drain and other programs
- Attending community events on behalf of EMWREP partners

- Removing invasive species and planting natives in public spaces
- Establishing gravel beds to grow trees for community plantings

In 2021, EMWREP will help to coordinate trainings for new stewards and provide mentorship as they plan and implement their capstone projects. We will also continue to engage and support our existing volunteers.

Adopt a Drain
<p>550 drains adopted in Washington County 14,077 drains adopted in Minnesota</p>

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. They may also receive a small sign, placed in their yard to help spread the action and let neighbors know of their commitment to clean water.

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 2021, EMWREP will continue to promote the program through a variety of means, including:

- Press releases, city newsletter articles, utility bill inserts
- Websites and social media
- Door-hangers distributed by volunteers
- Storm drain stenciling events
- Presentations to community groups and youth groups

Adopt a Raingarden
<p>55 raingardens adopted in Stillwater and Oak Park Heights</p>

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.

In 2021, EMWREP will collaborate with Sustainable Stillwater MN to engage Adopt a Raingarden volunteers and ensure that gardens are well-maintained. More info at:

www.mnwcd.org/adoptaraingarden.

3. 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.

Some of our key partnerships include:

Watershed Partners
70 partners in the Twin Cities

Metro Watershed Partners is a coalition of more than seventy public, private and non-profit organizations in the Twin Cities metro area. Through collaborative education and outreach, the Metro Watershed Partners promote a public understanding that inspires people to act to protect water in their watershed. Since 1996, partners have cooperated through educational projects, networking, and resource sharing.

The mission of the Metro Watershed Partners 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 special presentations, publishes blog-style stories through its www.cleanwatermn.org website, produces content for partners to use in their educational programming, and is host to the Adopt a Drain program.

In 2021, EMWREP coordinator Angie Hong will continue to serve on the Watershed Partners' steering committee and act as convener for large group meetings.

St. Croix Watershed Environmental Education Partnership (SWEEP)
78 partners in the Lower St. Croix Watershed

SWEEP (St. Croix Watershed Environmental Education Partnership) brings together staff from parks and nature centers, non-profit organizations, local government, and community groups in the Lower St. Croix watershed to inspire leadership in environmental education through networking, community engagement and collaborative events within the St. Croix River Watershed.

In 2021, SWEEP partners will distribute a monthly newsletter to highlight outdoor destinations and activities in the St. Croix region, organize an Earth Day passport program, and plan a St. Croix Youth Summit. EMWREP coordinator Angie Hong will continue to serve as a member of the SWEEP leadership team.

Nonprofit, citizen, and community groups

In addition to these larger partnership programs, EMWREP works closely with nonprofit, citizen, and community groups in our area, including:

- Master Gardeners
- Lake associations
- St. Croix River Association
- Pollinator Friendly Alliance
- Wild Ones
- Sustainable Stillwater MN

4. Youth education

Though K-12 students are not a primary audience for our education programming, EMWREP provides support for youth education initiatives that are partner-led.

In 2021, these include:

- **South Washington Watershed District (SWWD) Campus Greening projects:** In 2021, SWWD will be working with four elementary and one middle school in the South Washington County School District to convert unused turf areas to native plantings. In addition, SWWD will be engaging Carpenter Nature Center to conduct classroom lessons for students at these schools. EMWREP staff will help to provide coordination and education assistance for these projects.
- **Support for implementation of the Washington County Groundwater Plan:** In 2021, this will include promoting the Children's Water Festival and disseminating new water reuse curriculum developed by Rice Creek Watershed District and Forest Lake High School to other schools in the region.

5. Groundwater education

EMWREP provides support for implementation of the Washington County Groundwater Plan.

Planned activities for 2021 include:

- Educating rural residents about proper care and maintenance of individual sewage treatment systems (septics) to prevent surface and groundwater pollution.
- Helping Washington County to develop a Story Map in order to share the new Stormwater Reuse Assessment tool.
- Developing new educational fact sheets: How to detect leaks; Proper disposal of pesticides and fertilizers
- Providing education support as needed related to PFOS/PFOA
- Writing an article for city newsletters explaining the connection between water softener salt and chloride impairments

- (Maybe) Developing a direct mailing to for rural landowners in priority locations near lakes and streams with chloride impairments that will provide advice on how to reduce the amount of salt used in water softeners

6. Aquatic Invasive Species (AIS)

EMWREP also provides support for AIS education in Washington County and the Lower St. Croix Watershed.

Planned activities for 2021 include:

- Collaborating with St. Croix River Association to share AIS prevention information at community events (COVID dependent) and point-of-sale locations for bait and fishing licenses.
- Publishing AIS information in print and social media.
- Recruiting new volunteer AIS Detectors and supporting existing volunteers
 - Program details: 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. There are currently 14 training AIS Detectors in Washington County.
 - Volunteer-led projects include:
 - Conducting AIS surveys on area lakes
 - Volunteering at the AIS Summit, MAISRC research and Management showcase, and Upper Midwest Invasive Species Conference
 - AIS education/outreach, including staffing booths at the State Fair and community events and creating newsletter articles

7. Media and Communications

In 2021, EMWREP will continue to use a variety of communications platforms to share watershed and stormwater information, promote partner projects and programs, and publicize events and activities.

Print Communications

Newspaper articles: Angie Hong has published a weekly column for the Valley Life – Stillwater Gazette for 15 years. The articles are posted on-line at www.eastmetrowater.org and frequently appear in other local newspapers as well.

- **Chisago Press** (Circulation - 3963)
- **Forest Lake Lowdown** (Circulation – 13,997)
- **Forest Lake Times** (Circulation - 13,029) – *Hong column featured monthly*
- **Hugo Citizen** (Circulation – 14,500)
- **Scandia Country Messenger** (Circulation - 1075)
- **St. Croix 360** (On-line: 25,647 followers)
- **St. Croix Lowdown** (Circulation – 5000)
- **Valley Life / Stillwater Gazette** (Circulation - 17,479) – *Hong column featured weekly*
- **White Bear Press** (Circulation – 19,331)

Newsletters: EMWREP will also continue to provide content for city, watershed and WCD newsletters.

Online Communications

For years, EMWREP partners have relied on local newspapers to help us educate the public about water issues in our communities and promote workshops and events. During the past year, however, we’ve lost four community newspapers – the Oakdale-Lake Elmo and Maplewood-North St. Paul Reviews, as well as the Woodbury and South Washington Bulletins. In addition, we expect that most in-person events will continue to be canceled or postponed in 2021, due to COVID. As such, delivering information and education through webinars, social media, and websites has become one of our most important communications strategies.

Webinars: When EMWREP first offered workshops as webinars in 2020, we were pleasantly surprised to see attendance numbers triple in comparison with our traditional in-person workshops. Last year’s webinars reached more than 800 participants via Zoom and 400 via YouTube. Online learning allows us to easily engage residents from a large geographical area and helps to reduce barriers related to child care and commute-time that existed for our previous in-person workshops. In 2021, we plan to continue offering webinars throughout the year.

Social Media: EMWREP will continue to use multiple social media platforms to deliver watershed and stormwater information, promote partner projects and programs, and publicize events and activities. Platforms used include Facebook, Instagram, TikTok, YouTube, and Pinterest.

- **Facebook** has 2.45 billion monthly users, is used by 70% of Americans, and continues to be our primary platform for promoting workshops and other events; share partner success stories; and advertise site visits, cost-share grants, and other services that we offer. It is also easy and inexpensive to purchase Facebook ads to deliver our content to people in our communities that are most likely to be interested or to reach new audiences. Facebook continues to be the most widely used social media platform for all ages, races, and income levels and senior citizens are currently the fastest growing demographic on the platform.
- **Other social media platforms:** In 2021, EMWREP will continue working to develop a presence on other social media platforms, including Instagram, YouTube, Pinterest, Twitter and TikTok. We are experimenting with how to best engage people on these platforms and how to develop relevant messages for different audiences. We’ve learned that Twitter is a good way to get stories out to reporters in traditional media, whereas TikTok is a good way to engage young people ages 13-24.

Clean Water MN: Watershed Partners produces photos and articles for the www.cleanwatermn.org website, and also allows partners to use this content in their own

communications. In 2021, EMWREP will continue to share Clean Water MN blog posts on our social media platforms. We also rely on the campaign for high quality photos to use in our web and print communications.

Websites:

In addition to individual partner websites, EMWREP uses the following websites to share education and information:

- Washington Conservation District: www.mnwcd.org
 - [/events](#) – event info and registration
 - [/emwrep](#) – annual reports and plans
 - [/planting-for-clean-water](#) – resources for planting projects
 - [/virtual-tour](#) – short videos highlighting outdoor destinations and activities
- East Metro Water: <https://eastmetrowater.org>
 - Blog posts on a variety of topics
- Blue Thumb – Planting for Clean Water: www.bluethumb.org
 - Resources for raingardens, native plants, shoreline buffers, and Lawns to Legumes
- Clean Water Minnesota: www.cleanwatermn.org
 - 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.

Interpretive Exhibits and Signs

Over the years, EMWREP staff have helped to design dozens of high-quality displays, interactive exhibits, and interpretive signs. Examples include the Blue Thumb retractable “root pull” display; two suitcase-style interactive exhibits about groundwater; interpretive signs at Square Lake Regional Park, Afton Alps, and Joy Park; and AIS information signs at public boat launches in Washington County.

In 2021, EMWREP will provide design assistance for the following projects:

- Stormwater filter at Seasons Park in Woodbury (SWWD)
- Education Center at Glacial Valley Park in Woodbury (SWWD)
- Fishing pier for Forest Lake with signs in multiple languages (CLFLWD)

OUTREACH SUPPORT FOR PROGRAM AND PLAN IMPLEMENTATION

Audience: General public, landowners and land managers

Program Goals:

1. Publicize EMWREP partner programs and projects.
2. Engage public and private land owners to complete habitat and water quality improvement projects on their land.
3. Promote partners' BMP (Best Management Practices) and cost-share incentive programs and connect landowners with state and federal grants for water quality improvement projects.
4. Engage community members and other stakeholders to help meet water quality goals identified through local water plans, TMDL (Total Maximum Daily Load) studies, WRAP (Water Restoration and Protection) strategies, and regulatory programs.
5. Educate the public and engage community members to support implementation of the Lower St. Croix Comprehensive Watershed Management Plan.

Educational Objectives:

1. Community members will be aware of partner projects and programs happening in their communities and understand the benefits of these activities.
2. Landowners will develop the knowledge and skills to complete habitat and water quality improvement projects on their land, including: native plantings, raingardens, and native shoreline buffers.
3. Landowners will be aware of and utilize BMP, cost-share and other incentive programs to complete projects.
4. Community members will participate in public meetings, provide input for plans, and take action to support the goals outlined in local and regional plans.

OUTREACH SUPPORT: STRATEGIES & ACTIVITIES

1) Blue Thumb – Planting for Clean Water

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.

Initially, the partnership emphasized the water quality benefits of native planting projects; however, in recent years, pollinators have become a major focus as well. Blue Thumb is now affiliated with the Minnesota Lawns to Legumes program and offers web resources and workshops to help landowners develop pollinator-friendly gardens and plantings.

EMWREP helped to launch the Blue Thumb partnership in 2007 and developed many of the original education materials for the program. Currently, we use the website as a resource for the public and collaborate with Blue Thumb / Metro Blooms staff to conduct workshops in our region. Workshops help residents to connect with local resources including, incentive grants, free site visits, garden designs, plant lists, and conservation plans for larger properties.

In 2021, EMWREP plans to hold workshops via webinar on the following topics:

- Pollinator habitat plantings (Jan. 18) – 95 participants
- Shorelines and buffer maintenance (Feb. 25) – 92 participants
- Building climate resiliency (March 10) -
- Shoreline properties for realtors (TBD)
- Pollinator habitat plantings (April)
- Shorelines and buffer maintenance (April 29)
- Raingarden design and maintenance (May)
- Wetlands habitat and management (June)
- Healthy lawns and lawn alternatives (July)
- Shorelines and buffer maintenance (Sept.)
- Managing woodlands for habitat and clean water (Oct.)

BMP PROJECT MAINTENANCE

Two years ago, EMWREP created a project maintenance calendar for Google and Outlook to provide landowners with raingardens monthly reminders for common maintenance activities (ie. cleaning inlets or weeding):

www.mnwcd.org/maintenance-guide.



Additional resources for raingarden maintenance are also available at www.mnwcd.org/adoptaraingarden.

2) Promotion of BMP and cost-share incentive programs

Blue Thumb provides educational tools and resources for EMWREP to promote partners' BMP and cost-share incentive programs. In addition to conducting workshops for the general public, this often includes direct outreach to landowners in priority locations through mailings, door-knocking, and outreach to lake associations and homeowners' associations.

EMWREP has identified the following priorities for Blue Thumb outreach in 2021:

- **Shoreline Education:** Outreach and education for lake associations and shoreline landowners to encourage the preservation of native shoreline buffers and restoration of altered shorelines. This is a high priority action for watershed districts in northern Washington County, as well as for new partners in the northern planning region of the Lower St. Croix Watershed. Specific actions will include developing homeowner packets and mailed newsletters for shoreline landowners in CMSCWD, expanding the existing East Metro Lakes e-newsletter, and developing new relationships with lake groups in the northern planning region of the Lower St. Croix Watershed.
- **Outreach to Homeowners' Associations (HOAs):** Previously, EMWREP has conducted audience research and outreach to condo and townhome associations as part of a Clean Water grant project. In 2021, we plan to follow-up with HOAs in the RWMWD to assess the potential for additional BMP projects. In addition, EMWREP will provide information about stormwater BMP maintenance to HOAs in BCWD and CLFLWD.
- **Priority Locations/Audiences:**
 - Adopt-a-Drain participants
 - Lawns to Legumes demo neighborhood near Carver Lake
 - Use Master Water Stewards to help identify potential project locations
 - Targeted mailings to potential locations near Carver and Battle Creek Lakes
 - Bayport and southern MSCWMO communities
 - Neighbors of Ann Delgehausen (RCWD)

3) Stakeholder engagement

In the past, EMWREP has helped to coordinate stakeholder engagement for watershed planning processes – most recently the Comfort Lake – Forest Lake and Carnelian-Marine-St. Croix Watershed Districts' comprehensive watershed management plan updates and development of the Lower St. Croix Comprehensive Watershed Management Plan in 2020.

No new planning processes will be happening in 2021; however, Angie Hong will continue to act as the staff liaison for the Lower St. Croix Policy Committee.

EDUCATION AND OUTREACH TO FARMERS AND RURAL LANDOWNERS

With the planned expansion of EMWREP in 2021 to serve the entire Lower St. Croix watershed, partners will be hiring an agronomy and outreach specialist and developing an outreach and education program for farmers and rural landowners.

Approximately 80% of this position's time will be directly working with agricultural producers in the Lower St. Croix Watershed to identify economical farming practices with water quality benefits and make them a routine part of farm operations, while 20% of the position will be to support of implementation of BMPs led by program partners.

Priority locations: Priority locations for agricultural outreach and education include the subwatersheds of Rock Lake, Rock Creek, and Sunrise River, as well as farmland with direct drainage to the St. Croix River or its tributaries. A secondary priority for outreach will be areas draining to lakes that outlet to St. Croix River tributaries. Partners hope to engage landowners to implement structural and nonstructural BMPS on at least 3,000 acres of land.

Background and previous work: Anoka, Chisago, Isanti, Pine and Washington Soil and Water Conservation Districts have been working with farmers and rural landowners for more than 75 years. In previous years, EMWREP has provided limited support for agricultural education initiatives in Washington County, including workshops and targeted mailings. In addition, a conservation planner position was created in 2019 to serve to the Lower St. Croix watershed and help rural landowners to develop conservation plans for their properties.

During development of the Lower St. Croix CWMP, EMWREP staff conducted a number of stakeholder engagement activities, including:

- Surveying 387 agricultural landowners in Chisago, Pine and Washington Counties
- Conducting twelve one-on-one interviews with local farmers; and
- Holding small group conversations with 45 agricultural stakeholders during a Feb. 2, 2019 meeting

Feedback from these surveys, interviews and small group conversations will be used to develop the new Lower St. Croix agricultural outreach and education plan.



Professional Trainings for Business and Local Government

Audience: Water resource professionals, municipal staff, consultants and contractors, local elected and appointed officials, business owners, lawn care providers, winter maintenance providers

Program Goals:

1. Provide technical training to help EMWREP partners meet MS4 Permit requirements and reduce stormwater pollution.
2. Work in partnership with University of Minnesota to provide high-quality professional education at a local level.
3. Provide local decision makers (city councils, planning commissions, watershed boards, county commissioners, etc.) with information and training needed to implement policies, programs, and practices that protect and restore water resources. This includes, but is not limited to, Minimal Impact Development Standards (MIDS) and Shoreland/Buffer rules.
4. Offer professional trainings for area business owners, lawn care providers, and winter maintenance contractors to share information about local water issues and encourage business practices that protect surface and groundwater resources.

Educational Objectives:

1. Municipal employees will understand that stormwater runoff, erosion, and illicit discharge contaminate surface and groundwater resources and, also, that there are best management practices to reduce these causes of water pollution.
2. Local decision makers will understand that land use impacts water quality and that there are a variety of policies, programs and practices cities, counties, and watershed management organizations can implement to protect their water resources, including MIDS and shoreland/buffer rules.
3. Area business owners, lawn care providers, and winter maintenance contractors will learn how to conserve groundwater resources and reduce surface and groundwater pollution through a variety of practices, including:
 - a. Completing water efficiency audits;
 - b. Mowing higher and using fewer lawn chemicals; and
 - c. Reducing road salt application by using new technology, calibrating equipment, and adjusting anti-icing and deicing methods based on weather forecasts; and storing salt properly to reduce leaching.
 - d. Using and storing pesticides and fertilizers safely.

PROFESSIONAL TRAININGS FOR BUSINESS AND LOCAL GOVERNMENT

1) Training for Municipal Staff and Businesses

MS4 Municipal Training Resources

MS4 Permittees are required to provide training for staff on a variety of topics related to stormwater and pollution prevention. Below are links to eleven short videos developed by EMWREP that partners are encouraged to share via email or incorporate into staff meetings and training workshops.

- [Stockpile Management](#)
- [Use and Storage of Significant Materials](#)
- [Routine Street and Parking Lot Sweeping](#)
- [Pesticides and Fertilizers](#)
- [Right of Way Maintenance](#)
- [Vehicle Maintenance](#)
- [Road Maintenance](#)
- [Waste Disposal](#)
- [Emergency Response](#)
- [Cleaning of maintenance equipment, building exteriors, and dumpsters](#)
- [Illicit Discharge Detection and Elimination](#)
- [Raingarden Maintenance](#)
- [Parks Maintenance](#)

EMWREP has also developed print resources to help partners explain MS4 permit requirements to the public, and understand requirements related to stormwater inspections and maintenance.

In addition to the videos listed above, EMWREP staff are able to speak at staff trainings on request.

SMART Salting Workshops

In 2021, EMWREP plans to continue working with Fortin Consulting and the Minnesota Pollution Control Agency to hold SMART Salting workshops for public works staff, winter maintenance contractors, and property management companies.

Certified contractors listed at: www.pca.state.mn.us/water/salt-application-training

Find a model contract here: <https://www.edinamn.gov/422/Pollution-Prevention>

2) NEMO and MIDS for Local Decision-Makers

EMWREP conducts workshops and presentations to provide local decision makers (city councils, planning commissions, watershed boards, county commissioners, etc.) with information and training needed to implement policies, programs, and practices that protect and restore water resources. This includes, but is not limited to, Minimal Impact Development Standards (MIDS) and Shoreland/Buffer rules.

Our education program builds off of the NEMO model (non-point source education for municipal officials) that was originally developed by University of Connecticut and implemented in Minnesota through a partnership with Minnesota Extension.

MIDS – Minimal Impact Development Standards

Background: In 2010, Washington Conservation District leveraged funds from an EPA 319 grant to develop and pilot a Minimal Impact Development Standards (MIDS) Community Assistance Package in the St. Croix Basin. The four pilot communities - Centre City, Chisago, Lindstrom and East Bethel - received free education, training and consulting services to update plans, ordinances and codes to protect their local water resources and the St. Croix River. The community assistance package developed includes performance goals, a calculator for determining stormwater credits for best management practices, and ordinance guidance for communities.

Later, in 2014, Middle St. Croix Watershed Management Organization (MSCWMO) was awarded a Clean Water Fund Accelerated Implementation Grant through the Minnesota Board of Water and Soil Resources (BWSR) to help eight communities in Washington County update their existing ordinances to incorporate MIDS - Bayport, Baytown Twp., Lake St. Croix Beach, Lakeland Shores, Oak Park Heights, St. Mary's Point, and West Lakeland Twp.. MSCWMO staff and consultants met one-on-one with city and township staff, attended council and planning commission meetings, and provided ongoing education for community staff and leaders to guide the ordinance update process.

EMWREP provided education support for both of these projects.

Next steps: With the expansion of EMWREP to implement the Lower St. Croix CWMP, we hope to engage local decision-makers in the northern planning region and provide the information and assistance necessary for those communities to update their ordinances and policies to incorporate MIDS as well.

The focus for 2021-22 will be on developing relationships and laying the groundwork for communities to update their ordinances and policies in future years. Specific activities will include regional workshops and webinars, as well as presentations to councils and commissions.

Shoreland / Buffer Rules / View Corridors

As part of the Lower St. Croix CWMP, partners also recognized a need to work with communities in the northern planning region to establish stronger rules to protect shoreland buffer areas along lakes, streams and the St. Croix River.

One goal outlined in the CWMP is to set shoreline rules that prohibit landowners from clearing more than 25% of their lot width (or 35ft max) or adopt innovative shoreland standards to protect buffers, native ecosystems, and habitat corridors. Rules such as these already exist at the city or watershed district level for communities in the southern planning region.

EMWREP will provide the information and assistance necessary for communities to update their shoreland ordinances and policies as needed. We foresee a comprehensive outreach approach that combines MIDS and shoreland ordinance information and presents a menu of options for communities to select and implement.

Other Topics

In 2021, EMWREP anticipates that we will continue to offer workshops via webinar for local decision makers. Unfortunately, this most likely means postponing our popular St. Croix River Workshop on the Water until 2022. In addition, the Washington County water consortium offers a forum for presentations on a variety of topics.

Topics for education in 2021 include:

- Groundwater-surface water interaction
- Understanding watershed rules and ensuring that landowners and developers apply for permits for development and re-development projects
- Conducting an inventory of communities offering or considering irrigation controller programs

3) Racial Equity

In 2021 EMWREP will continue to work with staff and local leaders from EMWREP member entities to create more inclusive programming and develop racial equity goals for our work.

Staff have recommended that Washington Conservation District become a GARE partner in 2021. Angie Hong will also continue to work with other members of Watershed Partners to create multi-lingual education materials; examine barriers to racial equity; and develop new strategies for better engagement. EMWREP staff will examine current programming and look for ways to better engage communities of color in education, as well as other watershed work.

Appendix A: 2019-2021 Annual Budget

Staff Support and Overhead Expenses	Materials	Total
\$144,200	\$10,000	\$154,200.00

MEMBERSHIP STRUCTURE AND FUNDING CONTRIBUTIONS*

PARTNER	Annual Contribution
SWWD	\$25,000
VBWD	\$19,300
BCWD	\$19,300
CLFLWD	\$19,300
CMSCWD	\$12,700
RWMWD	\$12,700
RCWD	\$3,000
Washington County	\$12,800
MSCWMO	\$6,300
Bayport	\$700
Cottage Grove	\$2,700
Forest Lake	\$2,700
Lake Elmo	\$2,700
Hugo	\$2,700
Oakdale	\$2,700
Stillwater	\$2,700
Woodbury	\$2,700
Dellwood	\$700
Grant	\$700
Newport	\$700
Oak Park Heights	\$700
St. Paul Park	\$700
West Lakeland	\$700
Willernie	\$700
TOTAL	\$154,900.00