



2016 Annual Report



Above: (Clockwise from upper left) A young participant shows off a water scorpion found in Powers Lake, Woodbury; Lake Association meeting for Ramsey and Washington Counties; Stillwater residents learn more about Brown's Creek.

Members of the East Metro Water Resource Education Program:

Brown's Creek Watershed • Carnelian-Marine-St. Croix Watershed •
Comfort Lake-Forest Lake Watershed • 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
2016 Annual Report**

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About the East Metro Water Resource Education Program

Background: The East Metro Water Resource Education Program (EMWREP) is a partnership that was formed in 2006 to develop and implement a comprehensive water resource education and outreach program for the east metro area of St. Paul, MN. Current EMWREP partners include Brown's Creek, Carnelian-Marine-St Croix, Comfort-Lake Forest Lake, Rice Creek, Ramsey-Washington Metro, South Washington, and Valley Branch Watershed Districts, Middle St. Croix Watershed Management Organization, the cities of Cottage Grove, Dellwood, Forest Lake, Grant, Hugo, Lake Elmo, Newport, Oakdale, Oak Park Heights, Stillwater, St. Paul Park, Willernie, and Woodbury, West Lakeland Township, Washington County and the Washington Conservation District.

Purpose: The purpose of the shared education program is to provide education about the impacts of non-point source pollution on local lakes, rivers, streams, wetlands and groundwater resources and to engage people in projects that will help to protect and improve water quality in the region. In addition to educating the public, EMWREP also provides training for city, county and watershed staff and local elected officials.

Partnership Structure: EMWREP is guided by a steering committee comprised of representatives from each of the 24 partner organizations. The committee generally meets twice a year to provide recommendations on the program budget and activities. The EMWREP coordinator communicates regularly with partner staff, council members and board members; prepares an annual report on program activities; provides outreach data and statistics for partners' MS4 Permit reports; and communicates one-on-one with individual partners on projects throughout the year. All EMWREP reports, plans, and education updates are available on-line at www.mnwcd.org/emwrep.

Staff: During 2016, EMWREP staff included Angie Hong - education specialist and coordinator for the program, Jenn Radtke - education assistant (860 hours), and Wendy Griffin (now retired) - who provided 60 hours of support for rural education activities.

Coordination with Other Regional Education Efforts: One of the major benefits of the EMWREP program is that it has helped to strengthen relationships between Washington Conservation District, Washington County and the eight watershed management organizations and 14 cities that constitute the partnership, which has resulted in better coordination and less overlap in the management of local water resources. By promoting partner's BMP programs, EMWREP has helped to increase the total number of water quality improvement projects implemented and to target these projects in priority areas.

EMWREP staff help to coordinate and execute projects of Watershed Partners (a collaborative of more than 60 non-profit and public entities in the Twin Cities metro area), in addition to working in partnership with organizations active in the St. Croix Basin.

Accolades: In 2012, the Minnesota Association of Watershed Districts recognized EMWREP as the Watershed Program of the Year.

2016 Executive Summary

General Education Campaign: During 2016, EMWREP used a variety of strategies to promote partner programs and activities, and to educate the public about stormwater pollution and other issues affecting surface and groundwater resources. EMWREP contributed 54 press releases and news columns to 18 area newspapers, in addition to producing educational content for city newsletters, social media, and on-line news sites. EMWREP staff attended more than 30 community events and participated in the planning and program development for several regional water education initiatives.

Though the impact of these larger public education and awareness raising efforts is often hard to measure directly, we know they greatly improve the success of our targeted outreach activities and are usually the initial gateway through which people learn about partner organizations and get involved at a higher level.

In 2016, EMWREP also conducted the following special education projects:

- Education for Homeowners' Associations (HOAs):
 - Provided outreach support for the Green Communities Clean Water grant. During 2016, projects were completed at Evergreen Country Homes and Lakeridge Townhomes in Woodbury (RWMWD). Projects at Heritage Glen and Powers Lake Townhomes (Woodbury, SWWD) and Lakeview Terrace (Oakdale, RWMWD) will be completed in 2017.
 - Presented about the project at the St. Croix Summit.
 - Created a guidebook with guidelines for working with HOAs on clean water and landscaping projects.
- Education about groundwater and water conservation
 - Developed a water conservation education campaign for Century College.
 - Created two new tabletop displays about water conservation and groundwater.
 - Staged a "Water Bar" at the Washington County Fair.
- Worked to build relationships with lake associations in the East Metro
 - Hosted meetings in the spring and fall to discuss strategies for controlling aquatic invasive species (AIS).
 - Developed a monthly e-newsletter to provide information for lake association members in Chisago, Ramsey, and Washington Counties.
- Helped Watershed Partners (WSP) to launch a new metro-wide water education initiative
 - New website – www.cleanwatermn.org – features stories of Minnesotans taking action to protect their local water resources. An innovative tracking component was developed to help partners measure the individual and collective impact of the campaign.
 - WSP has continued to bring in speakers and offer workshops to help partners improve the effectiveness of their education and outreach efforts.
- Connected with new audiences through neighborhood nature events:
 - Family-friendly events were held in Stillwater (BCWD and CMSCWD), Cottage Grove (SWWD), Woodbury (SWWD), Maplewood (RWMWD), and Forest Lake (CLFLWD).
- Supported water education for area youth.
- Participated in the NAVIGATE St. Croix Program, which is a locally-led effort to enhance art, nature, and community connections in the St. Croix Valley.
- Worked with City of Maplewood and Valley Branch Watershed District to begin creating four interpretive signs for Joy Park.

Blue Thumb Program: EMWREP uses Blue Thumb – Planting for Clean Water (www.BlueThumb.org) tools and resources to enhance outreach efforts for watershed cost-share programs and neighborhood raingarden projects. The program was developed by the Rice Creek Watershed District in 2006 and is currently led by Metro Blooms.

- In 2016, EMWREP:
 - Taught landscaping workshops in Cottage Grove, Lake Elmo, Forest Lake, Scandia and Denmark Twp.
 - Hosted a Blue Thumb neighborhood party in Lakeland.
 - Led a raingarden maintenance training in Woodbury (Colby Lake).
 - Gave presentations at Mahtomedi Garden Club, Friends of Scandia Parks and Trails, Forest Lake Business to Business Group, the Master Gardener Spring Program, and a Washington County realtor training.
- For 2016, Washington Conservation District program staff reported:
 - 274 site visits
 - 21 new projects installed; 31 projects from previous years completed
 - 490.59 pounds of phosphorus (P) captured by all projects installed in 2016
 - 542,681.62 pounds of total suspended solids (TSS) captured by all projects in 2016

Rural Outreach: During 2016, EMWREP:

- Offered a workshop for horse owners.
- Held a farmer breakfast with information about cover crops and conservation programs.
- Provided outreach support for the MN Agricultural Water Quality Certification Program.

Stormwater U: EMWREP works in partnership with Minnesota Extension, the University of Minnesota Erosion and Stormwater Management Certification Program, and the Minnesota Erosion Control Association (MECA) to provide professional training and workshops for local government staff and consultants, as well as builders, developers and contractors. Training offered in 2016 included:

- MIDS Calculator workshop.
- Erosion and Sediment Control Regulatory Enforcement workshop.
- Presentations to Forest Lake Public Works staff, Washington County field staff, and county office staff about MS4 permits and illicit discharges (IDDE).

NEMO: The Northland NEMO program (Non-point Education for Municipal Officials) provides local elected officials and decision makers with resources and information to make informed decisions about land use and water quality in their communities. Northland NEMO is hosted by the University of Minnesota Extension and EMWREP is a partner organization.

In September 2016, EMWREP collaborated with partners to host the 7th Annual NEMO St. Croix River Workshop on the Water, which celebrated the 100th Anniversary of the National Park Service, provided information about riverway and stormwater standards, and helped community leaders understand the importance of an orderly development process.

MS4 Toolkit and Blue Biz: In 2009, EMWREP created the MS4 Toolkit – a collection of resources and educational materials to help local cities and watershed organizations meet their stormwater permit requirements. Until recently, the toolkit was available on-line on the Clean Water Minnesota website. Education and outreach resources for businesses and commercial entities were hosted on the same website. With the creation of a new www.cleanwatermn.org website, EMWREP is in the process of uploading the MS4 Toolkit and Blue Biz resources to a FTP site so that they are still available to local partners.

General Education Campaign

Minimum Control Measure Addressed

<input checked="" type="checkbox"/> Public education & outreach	<input type="checkbox"/> Construction site runoff controls
<input checked="" type="checkbox"/> Public participation & involvement	<input type="checkbox"/> Post-construction storm water management
<input checked="" type="checkbox"/> Illicit discharge detection and elimination	<input type="checkbox"/> Municipal pollution prevention & good housekeeping

Audience: General Public

Program Goals:

1. Provide education on water resource issues and stormwater pollution prevention for people living and working in the east metro area.
2. Collaborate with state and local government as well as non-profit and community groups to carry out educational activities.
3. Utilize master gardeners and other citizen volunteers to help conduct education and outreach.
4. Promote EMWREP partners and their BMP (Best Management Practices) programs.
5. Engage community members and other stakeholders in TMDL (Total Maximum Daily Load) and Non-Degradation Plan processes.

Educational Goals:

Learning

1. Increase the overall understanding and awareness of water resources and storm water runoff among the general public.
2. Increase understanding of the connection between individual actions and water resource quality among the general public.
3. Increase awareness of storm water best management practices among the general public.
4. Increase understanding of the roles that cities, watershed agencies, counties and conservation districts play in managing water resources.

Behavior Change

1. Engage the public in the prevention of storm water pollution at home.
2. Increase the utilization of storm water best management practices and adoption of desirable clean water practices among the general public.
3. Engage the public and other stakeholders in creating and implementing watershed, TMDL and Non-Degradation plans.
4. Unite government, non-profit and community based organizations with a common clean water theme.
5. Develop leaders among citizens and other water related organizations that can carry water resource education to the general public.

Water Quality Improvement

1. Reduce and prevent non-point source pollution of surface and groundwater resources.
2. Maintain adequate groundwater and drinking water resources.

Activities used to reach goals:

Maintaining and developing educational partnerships: EMWREP continues to work collaboratively with government, non-profit, private and citizen partners to engage the public, plan and promote educational events and activities, and develop and distribute educational materials and resources. EMWREP works with partners in both the Twin Cities Metro area and the St. Croix River Basin. Some of these many partners include:

- Local units of government: The 24 partnering entities in EMWREP, as well as other LGUs inside and outside of Washington County;
- Non-profits: St. Croix River Association, ArtReach St. Croix, local nature centers, Trout Unlimited.
- Schools and Universities: Century College, 4H, St. Croix Preparatory Academy
- Citizens: Lake Associations, Master Gardeners, churches, and other community groups.

Below is information about two of the regional partnerships EMWREP was part of in 2016:

WaterShed Partners: WaterShed Partners is a collaborative of more than 60 non-profit and public entities in the Twin Cities metro area that work together to educate the public about stormwater pollution. Angie Hong has been a member of the Watershed Partners steering committee for ten years.



During 2016, Watershed Partners developed and launched a new website (www.cleanwatermn.org) designed to help partners reach out to the public and encourage behavior change. The new campaign provides partner organizations with compelling stories and professional photos that they can use in their own communications and outreach. In addition to the stories, there is also a unique tracking component that allows Watershed Partners to measure how many people are accessing the stories and which media platforms are most successful.

Future plans for the next two years include helping partners to organize clean-up events in their communities (cleaning leaves, dirt and debris out of streets and storm sewers in spring and fall) as well as expanding an Adopt-a-Drain program that started in St. Paul.

In addition to the new media campaign, Watershed Partners continues to offer monthly meetings for partners and staffs the StormDrain Goalie booth at the Minnesota State Fair. Professional training topics in 2016 included:

- MS4 Permit updates
- National Park Service Centennial (workshop held on the Mississippi River)
- Best practices for social media
- Interpretive sign development
- Mississippi State of the River Report

NAVIGATE: Angie participated in [NAVIGATE](#), an initiative sponsored by Arts Midwest and Art Reach St. Croix to bring together artists and environmental professionals in the St. Croix Valley. The goal of the project was to develop partnerships, increase access to arts and nature in the region, and strengthen community connections.

EMWREP participated in more than 30 community and youth events in 2016. In addition, we held five neighborhood nature events around the county to engage with new audiences.

Community events:

- Lake Phalen Freeze Fest – Feb. 20 (St. Paul)
- The Governor’s Water Summit – Feb 27 (St. Paul)
- St. Croix Summit – March 23 (River Falls)
- Paul Douglas Climate Change Event – April 5 (Mahtomedi)
- Grant Earth Day Clean-Up – April 23 (Grant)
- Tree sale – April 22-23 (Lake Elmo)
- Great River Greening Gala – April 30 (St. Paul)
- Healthy Yards and Gardens ECFE – May 5 (St. Paul)
- White Bear Lake Conservation Event – May 7 (WBL)
- Oakdale Discovery Center Planting Event – May 7 (Oakdale)
- Mill Stream Day – May 15 (Marine on St. Croix)
- Waterfest – June 4 (Lake Phalen – St. Paul)
- Master Gardener Plant Sale – June 4 (Lake Elmo)
- Sustainable Stillwater launch party – June 9
- Belwin Bison Release – June 11 (Afton)
- Forest Lake Arts in the Park – July 19
- Washington County Fair – August 3-7 (Lake Elmo)
- Century College Back-to-School Fair – August 24 (Maplewood)
- Minnesota State Fair – Aug. 25 – Sept. 5
- PolliNATION – Sept 11 (Stillwater)
- Brown’s Creek Nature Event - September 13 (Stillwater)
- Washington County Environmental Fair and Family Event – October 4 (Lake Elmo)
- Campfire Program at St. Croix Bluffs Regional Park – October 22 (Hastings)



Above: Jenn’s children Linnea and Reed look on as the bison are released into the Belwin Prairie on June 11, 2016.

Student Programs:

- 4H Camp and Movie Festival – June 20-23 (Lake Elmo)
- Eco-Kids at Advent United Methodist – June 30
- Woodbury Safety Camp – July 19
- Cottage Grove Safety Camp – July 20
- Trout in the Classroom event – Sept. 16 (Afton)
- Children’s Water Festival – Sept. 28 (1300 4th grade students)
- Prairie seeding at St. Croix Prep (Oct. 28)

Neighborhood Nature Events:

- Cottage Grove Meadowgrass Park – June 22
- Woodbury Powers Lake – June 28
- Maplewood Keller’s Creek – July 13
- Stillwater South Twin Lake – July 26
- Stillwater Brown’s Creek Park – Sept. 13



Right: Families look for aquatic life in South Twin Lake, Stillwater.

Newspaper articles: EMWREP contributed more than 50 press releases and news columns to 18 area newspapers in 2016. Angie Hong's news columns (indicated in italics in the list below) are published weekly in the Valley Life edition of the Stillwater Gazette and bi-weekly in other area newspapers. Read them on-line at www.eastmetrowater.areavoices.com.



Chisago Press (Circulation - 3963)

March 8 – *Horse Workshop*
March 1 – *Community Supported Agriculture*
April 4 – Press release: Landscape design workshops
April 5 – *A chat about scat*
April 11 – *AIS*
May 10 – *Of sheep, scythes and lawns*
July 7 – Press release: Flowering rush
Oct. 18 – *Mow leaves instead of raking*

Forest Lake Lowdown (Circulation – 13,997)

Jan 20 – Press release: Winter Aeration CLFLWD
Feb 16 – Press release: Clean Water Fund
April 4 – Press release: Landscape design workshops
Nov 21 – Press release: MnTAP

Forest Lake Times (Circulation - 13,029)

Jan. 19 – *History of the MS4 Permit*
Jan 20 – Press release: Winter Aeration CLFLWD
March 1 – *Community Supported Agriculture*
March 8 – *Horse Workshop*
March 15 – *Spring Dreaming*
May 3 – *Wastewater*
May 10 – *Of sheep, scythes and lawns*
May 16 – *Frogs and toads*
April 5 – *A chat about scat*
April 11 – *AIS*
June 14 – *North and East Metro Groundwater Management Plan*
June 27 – Press release: Flowering rush on Forest Lake
July 12 – *Splish, splash, creepy crawlies*
Aug. 2 - *Maintaining New Native Plantings*
Aug. 2 – *Making better use of rainwater at CHS field*
Aug. 2 – *The economics of clean lakes and rivers*
Aug. 9 – *Out of Rock, Water*
Aug. 16 – *Join the PolliNATION*
Aug. 30 – *Recipe for saucy homegrown algae*
Sept. 13 – *Two llamas and a prairie*
Oct. 18 – *Mow leaves instead of raking*
Oct. 25 – *Lake turnover*
Nov. 15 – *Condos and townhomes are going green*
Nov. 28 – *Washington County partners with businesses to save money and water*
Dec. 19 – *Save money, do good – use less salt*

Hastings Star Gazette (Circulation – 5,547)

March 1 – *Community Supported Agriculture*

March 8 – *Horse Workshop*

Sept. 13 – *Two llamas and a prairie*

Hugo Citizen (Circulation – 14,500)

May 3 – *Wastewater*

March 8 – *Horse Workshop*

May 10 – *Of sheep, scythes and lawns*

June 14 – *North and East Metro Groundwater Management Plan*

June 27 – Press release: Flowering rush on Forest Lake

Aug. 16 – *Join the PolliNATION*

Oct. 18 – *Mow leaves instead of raking*

Nov. 28 – *Washington County partners with businesses to save money and water*

Nov. 28 – *Battling floods and saving trout*

Oakdale-Lake Elmo (Circulation – 11,066) & **Ramsey Reviews** (Circulation – 24,326)

Jan. 11 – *Water News for the New Year*

Jan 26 – *Under the Snow*

Feb. 2 – *Laugh in the face of the Winter Maker*

Feb. 22 – *History of the MS4 Permit*

March 1 – *Community Supported Agriculture*

March 8 – *Horse Workshop*

March 15 – *Spring Dreaming*

April 5 – *A chat about scat*

April 11 – *AIS*

April 18 – *Ode to Odonata*

April 26 – *Another reason to turn out the lights*

May 3 – *Wastewater*

May 10 – *Of sheep, scythes and lawns*

May 12 – Press release: SWWD plan update

May 24 – *Please park on the grass*

May 31 – *Giants of the prairie*

June 14 – *North and East Metro Groundwater Management Plan*

July 12 – *Splish, splash, creepy crawlies*

Aug. 9 – *Out of Rock, Water*

Aug. 16 – *Join the PolliNATION*

Aug. 23 – *Mushrooms*

Aug. 30 – *Recipe for saucy homegrown algae*

Sept. 13 – *Two llamas and a prairie*

Oct. 18 – *Mow leaves instead of raking*

Oct. 25 – *Lake turnover*

Nov. 15 – *Condos and townhomes are going green*

Nov. 28 – *Washington County partners with businesses to save money and water*

Dec. 19 – *Save money, do good – use less salt*

Scandia Country Messenger (Circulation - 1075)

Jan 28 – *Watershed District breaks ground on Clean Water Fund Project for Sand Lake*

Feb 23 – *All about insects*

March 1 – *Community Supported Agriculture*

March 8 – *Horse Workshop*

March 15 – *Spring Dreaming*

March 24 – *Shoreline landscaping*

April 11 – *AIS*

May 3 – *Wastewater*

May 31 – *Giants of the prairie*

June 20 – *Poetry of Nature*

June 27 – *Press release: Flowering rush on Forest Lake*

Aug. 16 – *Join the PolliNATION*

Aug. 30 – *Recipe for saucy homegrown algae*

Oct. 18 – *Mow leaves instead of raking*

Oct. 25 – *Lake turnover*

Dec. 19 – *Save money, do good – use less salt*

South Washington County Bulletin (Circulation - 8616)

Jan. 11 – *Water News for the New Year*

Jan. 19 – *History of the MS4 Permit*

Jan 26 – *Under the Snow*

March 1 – *Community Supported Agriculture*

March 8 – *Horse Workshop*

April 5 – *A chat about scat*

April 11 – *AIS*

April 26 – *Another reason to turn out the lights*

May 3 – *Wastewater*

May 10 – *Of sheep, scythes and lawns*

May 12 – *Press release: SWWD plan update*

May 24 – *Please park on the grass*

June 14 – *North and East Metro Groundwater Management Plan*

June 23 – *Maintaining New Native Plantings*

June 28 – *Making better use of rainwater at CHS field*

July 5 – *The economics of clean lakes and rivers*

Aug. 9 – *Out of Rock, Water*

Aug. 16 – *Join the PolliNATION*

Aug. 30 – *Recipe for saucy homegrown algae*

Sept. 13 – *Two llamas and a prairie*

Oct. 18 – *Mow leaves instead of raking*

Nov. 15 – *Condos and townhomes are going green*

Nov. 28 – *Washington County partners with businesses to save money and water*

Dec. 19 – *Save money, do good – use less salt*

St. Croix 360 (On-line: 25,647 followers)

Sept. 15 – *St. Croix Stories*

St. Croix Lowdown (Circulation – 5000)

Feb 16 – *Press release: Clean Water Fund*

April 4 – *Press release: Landscape design workshops*

Nov 21 – *Press release: MnTAP*

Valley Life edition of Stillwater Gazette (Circulation - 17,479)

Jan. 11 – *Water News for the New Year*
Jan. 19 – *History of the MS4 Permit*
Jan 26 – *Under the Snow*
Jan 28 – *Watershed District breaks ground on Clean Water Fund Project for Sand Lake*
Feb. 2 – *Laugh in the face of the Winter Maker*
Feb. 4 – *St. Croix Lake or River*
Feb. 16 – *Worlds apart and yet somehow not so different*
Feb 23 – *All about insects*
March 1 – *Community Supported Agriculture*
March 8 – *Horse Workshop*
March 15 – *Spring Dreaming*
March 29 – *Earth Day Clean-up*
April 5 – *A chat about scat*
April 11 – *AIS*
April 18 – *Ode to Odonata*
April 26 – *Another reason to turn out the lights*
May 3 – *Wastewater*
May 10 – *Of sheep, scythes and lawns*
May 16 – *Frogs and toads*
May 24 – *Please park on the grass*
May 31 – *Giants of the prairie*
June 8 – *Suwannee River*
June 9 – *Save the fish (AIS)*
June 14 – *North and East Metro Groundwater Management Plan*
June 20 – *Poetry of Nature*
June 23 - *Maintaining New Native Plantings*
June 28 – *Making better use of rainwater at CHS field*
July 5 – *The economics of clean lakes and rivers*
July 12 – *Splish, splash, creepy crawlies*
July 19 – *Camping without Water*
July 26 – *Maintaining New Native Plantings*
Aug. 1 – *The Water Bar*
Aug. 9 – *Out of Rock, Water*
Aug. 16 – *Join the PolliNATION*
Aug. 23 – *Mushrooms*
Aug. 30 – *Recipe for saucy homegrown algae*
Sept. 6 – *Celebrating the wild along Brown's Creek*
Sept. 13 – *Two llamas and a prairie*
Sept. 15 – *St. Croix Stories*
Sept 27 – *Unicorn Ranches*
Oct. 10 – *Love from Down Under*
Oct. 18 – *Mow leaves instead of raking*
Oct. 25 – *Lake turnover*
Nov. 1 – *Students plant 10 acres of prairie at St. Croix Prep*
Nov. 8 – *Brown's Creek rock crib*
Nov. 15 – *Condos and townhomes are going green*
Nov. 28 – *Battling floods and saving trout*

Nov. 28 – *Washington County partners with businesses to save money and water*
Dec. 5 – *Farmer in May Twp wages war on buckthorn and wins*
Dec. 19 – *Save money, do good – use less salt*
Dec. 22 – *Finding light in the darkness*

White Bear Press (Circulation – 19,331)

May 3 – *Wastewater*
June 14 – *North and East Metro Groundwater Management Plan*
Oct. 18 – *Mow leaves instead of raking*
Nov. 28 – *Washington County partners with businesses to save money and water*
Nov. 28 – *Battling floods and saving trout*

Woodbury Bulletin (Circulation - 7811)

Jan 26 – *Under the Snow*
Feb. 22 – *History of the MS4 Permit*
March 1 – *Community Supported Agriculture*
April 5 – *A chat about scat*
April 26 – *Another reason to turn out the lights*
May 31 – *Giants of the prairie*
May 10 – *Of sheep, scythes and lawns*
March 15 – *Spring Dreaming*
June 14 – *North and East Metro Groundwater Management Plan*
June 23 – *Maintaining New Native Plantings*
June 28 – *Making better use of rainwater at CHS field*
July 5 – *The economics of clean lakes and rivers*
Aug. 16 – *Join the PolliNATION*
Aug. 30 – *Recipe for saucy homegrown algae*
Sept. 13 – *Two llamas and a prairie*
Oct. 18 – *Mow leaves instead of raking*
Nov. 15 – *Condos and townhomes are going green*
Nov. 28 – *Washington County partners with businesses to save money and water*
Dec. 19 – *Save money, do good – use less salt*

City newsletter articles: Information about stormwater pollution, water resources and EMWREP partner activities reached more than 175,000 people through community newsletters in 2016.

Below are some of the topics covered in these newsletters:

Afton (pop. 2800) - [newsletters](#)

- Planting Butterfly Gardens
- Groundwater Exhibit at County Fair
- Septic System Grant Program
- Well Water Testing for Nitrates
- AIS - What you can do

Bayport (pop. 3200)

- Mow Like A Pro: Tips for Green Lawn and Clean Water
- Go Wild: Bring Birds and Insects to Your Backyard
- Spring Workshop Series Schedule
- Winter Salt Application: Less is More!

- Birchwood (pop. 875) - [newsletter](#)
 - Spring and Fall clean-ups for clean water
 - Water Quality Report
 - Help Stop Lake Pollution
- Cottage Grove (pop. 34,000) - [newsletter](#)
 - Winter Tree Care
 - Neighborhood Pond Dipping
- Hugo (pop. 14,000) - [newsletter](#)
 - Water Conservation Tips
- Lake Elmo (pop. 7647) - [newsletter](#)
 - Spring is Coming!
 - Gardening Workshop
 - Tree Sale
 - Horse Workshop
- Lake St. Croix Beach (pop. 1051) - [newsletter](#)
 - Non-toxic cleaners
 - Low-Salt diet
 - Well Testing
 - Lake St. Croix is an Impaired Water
 - 5 Way to Reduce Nutrients in Lakes and Streams
- Lakeland (pop. 1830) - [newsletter](#)
 - Spring Composting
 - Leaf Raking for Clean Water
- Mahtomedi (pop. 8000) - [newsletter](#)
 - Water Conservation
 - Keep leaves and grass clippings out of lakes and rivers
 - Water Conservation plantings
- Maplewood (pop. 39,337) – [newsletter](#)
 - Keep leaves and grass clippings out of lakes and rivers
- North St. Paul (pop. 11,694) – [newsletter](#)
 - Pollinator Habitat
- Oakdale (pop. 27,726) – [newsletter](#)
 - Explore you Lakes – Pond Dipping Event
- Oak Park Heights (pop. 4724) - [newsletter](#)
 - Spring Cleaning Tips
 - Lawn Maintenance
- Stillwater (pop. 18,000) - [newsletter](#)
 - Rain barrel sale
 - Fall clean-ups for clean water
- Stillwater Twp. (pop. 3000) - [newsletter](#)
 - Fall clean-ups for clean water
- West Lakeland (pop. 3547) - [newsletter](#)
 - Pollinator Landscaping Tips
 - Fall clean-ups for clean water
 - Household Hazardous Waste
- White Bear Lake (pop. 24,555) - [newsletter](#)
 - Fall clean-ups for clean water
 - Make'n'Take Rainbarrel Workshop – Woodbury
 - Fall clean-ups for clean water

Websites and Social Media: EMWREP uses social media, such as websites, Facebook, Twitter, Instagram and blogs to reach people in the community:

- **Washington Conservation District:** www.mnwcd.org received about 17,000 visits in 2016
- **Facebook:** WCD has 360 followers, up from 264 in 2015
- **Twitter:** @EMWREP has 185 followers and @angiehongwater has 322 followers
- **East Metro Water Blog:** www.eastmetrowater.areavoices.com had 8841 visits in 2016
- **Advertising:** EMWREP purchased Facebook advertising and averaged a reach of 5,000 per campaign:
 - Horse Workshop – 134 website clicks
 - Carpenter Nature Center Workshop – 197 website clicks
 - Forest Lake Landscaping Workshop – 62 website clicks
 - Scandia Rural Lands Workshop – 92 website clicks
 - Lake Elmo Landscaping Workshop – 80 website clicks
 - Brown’s Creek Nature Event – 33 Event RSVPs
 - AIS Campaign – 2,817 website clicks and had a reach of over 50,000



Special Projects: In 2016, EMWREP also conducted the following special education projects:

- Education for Homeowners’ Associations (HOAs):
 - Provided outreach support for the Green Communities Clean Water grant. During 2016, projects were completed at Evergreen Country Homes and Lakeridge Townhomes in Woodbury (RWMWD). Projects at Heritage Glen and Powers Lake Townhomes (Woodbury, SWWD) and Lakeview Terrace (Oakdale, RWMWD) will be completed in 2017.
 - Jenn and Angie co-presented at the St. Croix Summit on the topic of *Reaching New Audiences: Effective Outreach to Homeowner’s Associations.*
 - Jenn created a guidebook with guidelines for working with HOAs on clean water and landscaping projects.
 - EMWREP hosted a Raingarden Celebration for 30 residents at Evergreen Country Homes in Woodbury. A similar celebration is planned for Lake Ridge Townhomes in the spring of 2017.
- Education about groundwater and water conservation:
 - Developed a water conservation education campaign for Century College that included posters, social media advertising, and a table with two table top displays and a survey conducted at the “Back to School BBQ.”
 - Created new tabletop displays about water conservation and groundwater.
 - Staged a “Water Bar” at the Washington County Fair.



Above: WCD landscape designer Tara Kline talks about a new planting project at Evergreen Townhomes.

- Worked to build relationships with lake associations in the East Metro:
 - Hosted meetings in the spring and fall to discuss strategies for controlling aquatic invasive species (AIS).
 - Developed a monthly e-newsletter to provide information for lake association members in Chisago, Ramsey, and Washington Counties.
 - Worked with City of Maplewood and Valley Branch Watershed District to create four interpretive signs for Joy Park.
-

New Projects:

- **Master Water Stewards:** During 2016, EMWREP applied for and received a 2017-19 Clean Water grant to recruit and train 20 citizen volunteers in the Brown's Creek, Carnelian-Marine-St. Croix, Comfort Lake - Forest Lake, Middle St. Croix, and South Washington Watersheds. To become certified, stewards will complete 50 hours of coursework and a capstone project. After becoming certified, stewards provide 50 hours of volunteer service to their host watershed during the next year, and 25 hours per year of volunteer service in subsequent years. We anticipate that stewards will help EMWREP to staff community events, engage local communities in water pollution prevention efforts, and provide assistance for other projects such as raingarden maintenance.
-

Evaluation: Though the impact of public education and awareness raising efforts is often hard to measure directly, we know they greatly improve the success of our targeted outreach activities and are usually the initial gateway through which people learn about EMWREP partner organizations and engage at a higher level by attending a workshop, participating in a watershed planning process, or installing a clean water project on their property.

The new WaterShed Partners metro-wide clean water education initiative will include several components designed to make it easier for partners to measure the impact of their outreach. Educational content will be delivered in a variety of formats, including email, websites, and Facebook and Twitter posts, making it easy to track how many people are reading the information. Partners will also track numbers of bags of refuse collected during fall clean-up events, which can be used as a proxy for the amount of phosphorus removed from the stormwater runoff in these areas.

Blue Thumb

Planting for Clean Water

Minimum Control Measure Addressed

<input checked="" type="checkbox"/> Public education & outreach	<input type="checkbox"/> Construction site runoff controls
<input checked="" type="checkbox"/> Public participation & involvement	<input type="checkbox"/> Post-construction storm water management
<input type="checkbox"/> Illicit discharge detection and elimination	<input type="checkbox"/> Municipal pollution prevention & good housekeeping

Audience: Homeowners

Program Goals:

1. Promote native gardens, raingardens and shoreline plantings in targeted areas within EMWREP partner communities.
2. Coordinate Blue Thumb outreach with partner BMP programs and TMDL implementation.
3. Coordinate with landscapers, nurseries, Master Gardeners, and others to conduct outreach and implement projects.
4. Publicize and utilize demonstration gardens created by the program to increase educational benefit. Create signage, conduct tours and highlight demonstration projects.

Educational Goals:

Learning

1. Provide a visible “hook” to discuss and encourage people to think about stormwater and water resources.
2. Increase understanding of native plants, raingardens and shoreline stabilization as best management practices for clean water.

Behavior Change

1. Engage the public in preventing non-point source water pollution.
2. Increase the utilization of native plantings, raingardens and shoreline stabilization by local residents.

Water-quality Improvement

1. Reduce and prevent non-point source pollution of surface and groundwater resources.
2. Maintain adequate groundwater and drinking water resources.

Activities used to reach goals:



Regional collaboration: The Rice Creek Watershed District (RCWD) developed the Blue Thumb – Planting for Clean Water program in 2006 as a “one stop shop” to for district landowners to learn about and find resources to plant native gardens, raingardens, and shoreline plantings. Over the next eight years, EMWREP and others helped RCWD to develop the program into a public-private partnership with more than 70 partners in the upper Midwest - nurseries, landscaping companies, watershed agencies, cities, non-profits and citizen groups. During 2015, leadership of the program was transferred from RCWD to Metro Blooms, a non-profit organization based in Minneapolis.

Over the years, EMWREP has used Blue Thumb tools and resources, such as the website and print materials, to conduct public education and enhance outreach efforts. EMWREP also uses Blue Thumb materials to promote watershed cost-share programs, conduct targeted outreach for neighborhood raingarden projects, and teach educational workshops for homeowners.

Workshops: In 2016, EMWREP taught landscaping workshops in Cottage Grove, Lake Elmo, Forest Lake, Scandia, Denmark Twp., and Woodbury.

- Landscape design workshops
 - Cottage Grove – April 26 (30 people)
 - Lake Elmo – April 7 (30 people)
 - Forest Lake – May 4 (24 people)
 - Scandia – April 27 (17 people)
 - Denmark Twp. – May 10 (14 people)
- Raingarden maintenance workshops
 - Woodbury (Colby Lake) – April 20

Neighborhood Parties: EMWREP held one neighborhood party in 2016:

- Lakeland – May 24, hosted by Sally Arnesen

Presentations:

- Mahtomedi Garden Club – Jan. 12 (20 people)
- Forest Lake Business to Business Group – Jan. 21 (15 people)
- Friends of Scandia Parks and Trails – Feb. 18 (25 people)
- Master Gardener Spring Program – March 26
- Washington County realtor training – Nov. 17

Targeted homeowner outreach: EMWREP provided assistance for targeted outreach within Stillwater and the lower portion of MSCWMO (St. Croix direct drainage).

Integration with partner Best Management Practices programs: EMWREP continues to integrate public education and outreach with partner BMP programs, using workshops, neighborhood gatherings and community events to promote cost-share programs and recommended practices. The BMP program liaisons report the following for 2016:

- 274 site visits
- 21 new projects installed; 31 projects from previous years completed
- 490.59 pounds of phosphorus (P) captured by all projects installed in 2016
- 542,681.62 pounds of total suspended solids (TSS) captured by all projects in 2016

A map of BMP projects and workshop participants in Washington County can be found at www.mapfeeder.net/wcdbmp.

Promotional materials: EMWREP has created a suite of print materials and brochures to help residents learn about native plants, raingardens, shoreline plantings, lawn care, and other aspects of landscaping for clean water. We also have interactive displays, digital photo frames, posters and banners that we display at community events and loan out to EMWREP partners and community groups. Go to www.mnwcd.org/emwrep-resources for pictures and downloadable pdf's of handouts and displays.

Evaluation: The number of raingardens and other residential projects installed in Washington County remains high each year, at least in part, as a result of EMWREP education and outreach efforts.

Rural Outreach

Minimum Control Measure Addressed

<input checked="" type="checkbox"/> Public education & outreach	<input type="checkbox"/> Construction site runoff controls
<input checked="" type="checkbox"/> Public participation & involvement	<input type="checkbox"/> Post-construction storm water management
<input type="checkbox"/> Illicit discharge detection and elimination	<input type="checkbox"/> Municipal pollution prevention & good housekeeping

Audience: Rural landowners

Program Goals:

1. Find creative ways to engage rural landowners in projects that improve habitat and also reduce erosion and non-point source water pollution.
2. Promote projects on sensitive and highly erodible lands, such as steep slopes, ravines and bluff tops; encourage buffer plantings on streams, lakes and wetlands; and help people to restore wetlands and natural stream corridors.
3. Coordinate outreach with partner BMP programs and TMDL implementation.

Educational Goals:

Learning

1. Increase awareness about watersheds and water resource issues in the East Metro, as well as the causes of non-point source water pollution.
2. Increase awareness of and knowledge about wildlife habitat requirements.
3. Increase public knowledge about forest, prairie and wetlands systems, including;
 - a. The roles that plants, animals and non-living components such as soil and water play in ecosystems; and
 - b. The threats posed by invasive species, habitat fragmentation and degradation and loss of natural processes.
4. Educate local residents about how to improve existing and create habitat on their property to attract wildlife and reduce runoff pollution.

Behavior Change

1. Engage private property owners in projects that will improve habitat and reduce non-point source water pollution. Specific actions may include:
 - a) Removing buckthorn and other invasive plant species, especially on steep slopes, ravines and bluff tops, and in floodplains and drainage paths.
 - b) Planting native trees, shrubs and plants, especially on steep slopes, ravines and bluff tops, and in floodplains and drainage paths.
 - c) Repairing ravines, gullies and other erosion areas with native plants that also provide habitat.
 - d) Establishing buffer plantings on streams, lakes and wetlands.
 - e) Restoring wetlands and natural stream corridors.

Water-quality Improvement

1. Reduce and prevent non-point source pollution of surface and groundwater resources.
2. Maintain adequate groundwater and drinking water resources.

Activities used to reach goals:

Collaboration with local non-profits and sportsmen groups: EMWREP continues to seek out opportunities for collaboration with local non-profits and sportsmen groups in order to better reach rural landowners. EMWREP also provides support to the Washington Conservation District for some of its agricultural and rural outreach programs.

Workshops:

- Farmer breakfast: March 5, Lake Elmo
 - Topics included the MN Water Quality Certification program and two new grants for reducing phosphorus to the St. Croix River.
- Horse-owners workshop: March 21, Lake Elmo.
- Groundwater workshop: June 16, Afton.



Above: Rural landowners in Washington County learn about new programs to protect land and water resources.

Kelle's Creek Outreach: During 2016, EMWREP provided outreach support for a Valley Branch Watershed District special grant to reduce to *E. coli* contamination in Kelle's Creek. VBWD is offering free voluntary septic inspections to homeowners in the Kelle's Creek watershed.

Support for targeted implementation projects: During 2016, EMWREP also provided outreach support for several rural outreach programs operated by the Washington Conservation District, including recruiting participants for the MN Water Quality Certification program and outreach to conservation easement holders.

Integration with partner BMP programs: EMWREP strives to integrate outreach and education efforts with partner BMP programs by encouraging landowners to schedule free site visits with Conservation District staff and apply for cost-share funding through their local watershed organization for habitat and clean water projects on their land.

Promotional materials: EMWREP distributes educational materials dealing with a variety of topics, including woodland management, prairies, and invasive species control.

Evaluation: During 2016, EMWREP did not conduct any audience research with rural landowners. Previous focus groups and surveys have indicated that rural landowners in our area are interested in creating and improving wildlife habitat on their land and managing invasive species, so we have modified our outreach to highlight the connections between habitat and clean water.

Stormwater U

Minimum Control Measure Addressed

<input type="checkbox"/> Public education & outreach	<input checked="" type="checkbox"/> Construction site runoff controls
<input type="checkbox"/> Public participation & involvement	<input checked="" type="checkbox"/> Post-construction storm water management
<input checked="" type="checkbox"/> Illicit discharge detection and elimination	<input checked="" type="checkbox"/> Municipal pollution prevention & good housekeeping

Audience: Municipal staff, consultants, and contractors

Program Goals:

1. Provide technical training for municipal staff, consultants and contractors to help them meet MS4 Permit requirements and reduce stormwater pollution.
2. Work with local communities and EMWREP partners to identify training needs and topics.
3. Develop high-quality trainings that can be carried to communities outside the EMWREP region by the University of Minnesota Extension and other partners.
4. Encourage EMWREP partners and local MS4 communities to send at least one staff person or contractor to each Stormwater U workshop.

Educational Goals:

Learning

1. Increase understanding of non-point source water pollution and water resource connections among municipal staff, consultants and contractors.
2. Increase this audience's understanding of their role in achieving and maintaining clean surface and groundwater resources.

Behavior Change

1. Through training, enable EMWREP partners and local communities to reduce stormwater pollution through illicit discharge detection and elimination, construction site runoff controls, post-construction stormwater management and municipal pollution prevention.

Water-quality Improvement

1. Reduce and prevent non-point source pollution of surface and groundwater resources.
2. Maintain adequate groundwater and drinking water resources.

Activities used to reach goals:

Coordination with University of Minnesota Programs: In 2016, EMWREP coordinated with Minnesota Extension, the University of Minnesota Erosion and Stormwater Management Certification Programs, and the Minnesota Erosion Control Association (MECA) to provide professional training and workshops for local government staff and consultants, as well as builders, developers and contractors.

Workshops: EMWREP co-hosted the following workshops:

- MIDS Calculator workshop – Oakdale.
- Erosion and Sediment Control Regulatory Enforcement workshop – Oakdale.

Presentations: During 2016, EMWREP also gave special presentations about MS4 permits and illicit discharge detection and elimination (IDDE):

- Forest Lake Public Works staff.
- Washington County field staff.
- Washington County office staff.

Evaluation: Workshop evaluations were used to measure learning at the MIDS Calculator and U of MN Erosion Control Workshops.

Northland NEMO

Minimum Control Measure Addressed

<input type="checkbox"/> Public education & outreach	<input type="checkbox"/> Construction site runoff controls
<input type="checkbox"/> Public participation & involvement	<input checked="" type="checkbox"/> Post-construction storm water management
<input type="checkbox"/> Illicit discharge detection and elimination	<input type="checkbox"/> Municipal pollution prevention & good housekeeping

Audience: Local elected officials and decision makers

Program Goals:

1. Work with NEMO partners to develop outreach programs for local communities that cover a range of topics related to water resources management.
2. Use NEMO programs to provide local decision makers such as city councils, planning commissions, watershed boards and county commissioners with the information they need to make land use decisions and protect water resources.

Educational Goals:

Learning

1. Increase understanding of water resources and storm water management among elected officials and decision makers.
2. Increase understanding among elected officials and decision makers of the connection between land use and water quality.

Behavior Change

1. Increase the implementation of city ordinances, zoning and planning practices that enable low impact development and stormwater best management practices.

Water-quality Improvement

1. Prevent non-point source water pollution from new development and redevelopment.
2. Maintain adequate groundwater and drinking water resources.

Activities used to reach goals:

Workshops: During 2016, EMWREP co-organized the 7th Annual St. Croix River Workshop on the Water on September 15.

- Topics included:
 - Celebrating the 100th Anniversary of the National Park Service
 - Riverway and stormwater standards.
 - Using an orderly process to review development applications.
- 67 local elected and appointed officials and community leaders participated along with approximately 20 experts and staff.

St. Croix Basin Minimal Impact Design Standards (MIDS) grant project: EMWREP continued to provide support for the MIDS St. Croix Community Assistance, which was completed at the end of 2016. Education support included outreach to communities, workshops, and project evaluation.

Washington County Water Consortium: In addition to conducting education and workshops for local communities, EMWREP staff provides support to Washington County for the Water Consortium, a group that includes city, county and watershed staff and officials, as well as state agencies and others working on surface and groundwater issues in Washington County. EMWREP helps to plan monthly meetings, schedule speakers, facilitate group conversations during the meetings, and plan the annual BMP tour.

Evaluation: Consistently high levels of participation from local communities indicate that our educational offerings are filling a need for local decision makers. Evaluations from the St. Croix Workshop on the Water indicated that participants found high educational value in the program:

- 90% of participants said the workshop had a high educational value in learning about:
 - The St. Croix as significant amenity;
 - Riverway policies and standards;
 - MIDS stormwater policies; and
 - Their roles as local leaders.
- 81% of leaders attending said they would take action as a result of what they learned:
 - Working towards implementing and adopting MIDS in their own community;
 - Utilize the checklist process, adopting a pre-application meeting process, and making their application process more transparent; and
 - Sharing information with other leaders who were not present for the program.

MS4 Toolkit

Minimum Control Measure Addressed

<input checked="" type="checkbox"/> Public education & outreach	<input checked="" type="checkbox"/> Construction site runoff controls
<input checked="" type="checkbox"/> Public participation & involvement	<input checked="" type="checkbox"/> Post-construction storm water management
<input checked="" type="checkbox"/> Illicit discharge detection and elimination	<input checked="" type="checkbox"/> Municipal pollution prevention & good housekeeping

Audience: General public, municipal staff and contractors, local elected officials, and other target audiences

Program Goals:

1. Provide simple and effective materials to MS4 staff to use when educating target audiences.
2. Help EMWREP partners to meet MS4 permit requirements.

Educational Goals:

Learning

1. Increase understanding of non-point source water pollution and stormwater best management practices among the target audiences.

Behavior Change

1. Engage municipalities and MS4 staff as active partners toward reducing non-point source water pollution from stormwater runoff and illicit discharges.
2. Increase the utilization of stormwater best management practices among the target audiences.
3. Increase the detection and elimination of illicit discharges to storm water systems.
4. Increase the utilization of best management practices in street sweeping, salt application, landscaping and other municipal operations.

Water-quality Improvement

1. Reduce and prevent non-point source pollution of surface and groundwater resources.
2. Maintain adequate groundwater and drinking water resources.

Activities used to reach goals: Until recently, the toolkit was available on-line on the Clean Water Minnesota website. Education and outreach resources for businesses and commercial entities were hosted on the same website. With the creation of a new www.cleanwatermn.org website, EMWREP is in the process of uploading the MS4 Toolkit and Blue Biz resources to a FTP site so that they are still available to local partners.

Evaluation: EMWREP has not evaluated the use of the toolkit materials in recent years.

APPENDIX A: EDUCATION PROGRAM BUDGET FOR 2016-2018

Staff Support and Overhead Expenses (1.5 FTE)	Materials	Total
\$136,800	\$10,000	\$146,800

MEMBERSHIP STRUCTURE AND FUNDING CONTRIBUTIONS*

* PARTNER contributions will be reviewed and adjusted on an annual basis, as needed and in accordance with the terms of the Agreement.

PARTNER	Annual Contribution
SWWD	\$24,000
VBWD	\$18,500
BCWD	\$18,500
CLFLWD	\$18,500
CMSCWD	\$12,250
RWMWD	\$12,250
RCWD	\$2,500
Washington County	\$12,250
MSCWMO	\$6,000
Cottage Grove	\$2,500
Forest Lake	\$2,500
Lake Elmo	\$2,500
Hugo	\$2,500
Oakdale	\$2,500
Stillwater	\$2,500
Woodbury	\$2,500
Dellwood	\$650
Grant	\$650
Newport	\$650
Oak Park Heights	\$650
St. Paul Park	\$650
West Lakeland	\$650
Willernie	\$650
TOTAL	\$146,800