



2015 Annual Report



Above: Decision makers in the Forest Lake area learn about stormwater projects, issues and opportunities at a workshop led by EMWREP and Minnesota Extension.

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 • Lake Elmo • Middle St. Croix Watershed • Newport • Oak Park Heights
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
2015 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, Lake Elmo, Newport, 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 22 partner organizations. The committee generally meets twice a year to provide recommendations on the program budget and activities. During 2015, EMWREP staff included Angie Hong, full-time education specialist and coordinator for the program, Jenn Radtke, half-time education assistant, and Wendy Griffin, a Washington Conservation District natural resource specialist who provided 200 hours of support for rural education activities. The EMWREP coordinator sends a quarterly e-newsletter to all partners' staff, council members and board members, and communicates one-on-one with individual partners on projects throughout the year. The EMWREP education plan is revised every two to three years to accommodate changing priorities and new target audiences. In addition, the EMWREP coordinator prepares an annual report on program activities and provides outreach data and statistics for partners' MS4 Permit reports. All EMWREP reports, plans, and education updates are available on-line at www.mnwcd.org/emwrep.

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 eight 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 has also played a central role in the coordination and development of two regional education programs, Blue Thumb and WaterShed Partners. Blue Thumb is a public-private partnership with 55 members in the Upper Midwest, developed to promote the use of native plantings, rain gardens and shoreline plantings to conserve water resources and reduce runoff pollution. WaterShed Partners is a collaborative of more than 70 non-profit and public entities in the Twin Cities metro area that work together to educate the public about stormwater pollution. Additionally, EMWREP frequently partners with organizations within the St. Croix River Basin for educational events and activities.

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

2015 Executive Summary

General Education Campaign: During 2015, EMWREP continued to use a variety of strategies to educate the general public about stormwater pollution and other issues affecting the quality of surface and groundwater resources, and to inform them about partner programs and activities. EMWREP contributed 73 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 20 community events and participated in the planning and program development for several regional water education initiatives as well.

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 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.

In 2015, EMWREP also conducted the following special education projects:

- Continued outreach with Homeowners' Associations
- Provided education about groundwater and water conservation
- Worked to build relationships with lake associations
- Engaged citizens in watershed activities and plan updates
- Supported water education for area youth
- Helped WaterShed Partners develop a new metro-wide water education initiative

Blue Thumb Program: EMWREP uses Blue Thumb – Planting for Clean Water (www.BlueThumb.org) tools and resources to conduct public education and enhance outreach efforts, as well as promote watershed cost-share programs, conduct targeted outreach for neighborhood raingarden projects, and teach educational workshops for homeowners. The program was developed by the Rice Creek Watershed District in 2006 and is now led by Metro Blooms.

- In 2015, EMWREP conducted raingarden design workshops in Bayport and Marine on St. Croix, and held raingarden maintenance workshops in Lake Elmo and Stillwater. We also coordinated neighborhood parties in Stillwater and Oakdale.
- In January 2015, we conducted a survey of 433 BMP participants and workshop attendees from 2010-2015. 82 people responded.
- For 2015, BMP program staff reported:
 - 292 site visits
 - 31 new projects installed; 14 projects from previous years completed
 - 97.5 pounds of phosphorus (P) captured by all projects installed in 2015
 - 19,389 pounds of total suspended solids (TSS) captured by all projects in 2015

Rural Outreach: During 2015, EMWREP offered a workshop for horse owners. In addition, EMWREP provided outreach support for Washington Conservation District's Turf to Prairie grant, Top50P!, and nitrates well water testing in southern Washington County.

Blue Biz: The Blue Biz program consists of a website (www.cleanwaterMN.org/businesses) and outreach materials that partners can use to engage commercial property owners in BMP projects.

Stormwater U: In 2015, 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, including:

- 1) Turfgrass Maintenance
- 2) Stormwater Practices Inspections and Maintenance; and
- 3) Erosion Control

We also distributed a set of ten 10-minute PowerPoint presentations for municipal partners to use during monthly staff meetings. The presentations cover training topics included under Minimum Control Measure 6 of the MS4 permit.

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.

During 2015, EMWREP collaborated with NEMO and local partners to host two workshops for local decision makers:

- *St. Croix River Workshop on the Water:* Aug. 6
- *Protecting and improving lakes and streams in Forest Lake:* Sept. 1

MS4 Toolkit: The MS4 toolkit is hosted on the Clean Water MN website at www.cleanwatermn.org. The on-line kit includes training materials to help MS4 entities and EMWREP partners meet the six minimum control measures outlined in the MS4 permit.

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 22 partnering entities in EMWREP, as well as other LGUs inside and outside of Washington County;
- **Non-profits:** St. Croix River Association, Friends of the Mississippi River, Great River Greening, Family Means, local nature centers, sportsman groups;
- **Private partners:** Corporations such as 3M and Blue Cross – Blue Shield; and
- **Citizens:** Lake Associations, Master Gardeners, churches, and other community groups.

Below is information about some of the regional partnerships EMWREP was part of in 2015:

WaterShed Partners: WaterShed Partners is a collaborative of more than 70 non-profit and public entities in the Twin Cities metro area that work together to educate the public about stormwater pollution.

- The MS4 Toolkit, created by EMWREP in 2009, is hosted on the www.cleanwatermn.org website.
- EMWREP helped to staff the StormDrain Goalie booth at a Minnesota Wild hockey game and the MN State Fair Eco Experience. WSP also has interactive exhibits at the State Fair DNR Building.
- Angie Hong has been a member of the WSP steering committee for eight years and was the convener for the partnership's monthly meetings in 2016.



MINNESOTA WATER
LET'S KEEP IT CLEAN

WaterShed Partners spent 2015 developing a new metro-wide clean water education initiative, which will launch in the spring of 2016. The action-based campaign will focus on educating urban/suburban residents about the importance of raking and sweeping leaves and organic debris from curbsides and storm drain inlets in order to reduce stormwater pollution and localized flooding. The initiative will include customizable content for newsletters, websites and social media, with high-quality graphics and trackable links (to measure how many people access the materials). During the second phase of the initiative, WSP will create an easy-to-use toolkit to help partners organize and evaluate the impact of community clean-ups in their neighborhoods and cities.

During 2015, EMWREP staff:

- Attended professional trainings offered by Doug MacKenzie-Mohr and Erik Eckl on Community Based Social Marketing and Watershed Communications
- Participated in project planning and development for the new WSP clean water education initiative, including:
 - Surveys and brainstorming sessions with area stormwater professionals
 - Strategic planning with Erik Eckl of *Water Words that Work*
 - Meeting with EMWREP partners to discuss potential locations for community clean-ups in 2016

St. Croix Summit: Angie Hong helped to plan the [St. Croix Summit](#) (formerly known as the St. Croix Basin Conference), which was held on April 29 at the Water Street Inn in Stillwater. This year's conference *Changing Climate, Changing Times; Reaching New Audiences* focused on: 1) Impacts of climate change; 2) Reaching new audiences; and 3) Using art as a tool to engage and educate.

NAVIGATE: Angie has also been participating in a St. Croix initiative to bring together artists and environmental professionals in the lower St. Croix Valley. [NAVIGATE](#), which is sponsored by Arts Midwest and Art Reach St. Croix, has 20 participants from both sides of the river. During five working sessions, the group will be developing a shared vision and strategic plan for elevating the prominence of arts and nature in the region in order to protect natural resources in the area, strengthen local economies, and create vibrant communities.

Master Water Stewards: In 2015, the St. Croix Valley Foundation received a \$192,000 grant from the US EPA to develop a [St. Croix Master Watershed Stewards Program](#). The program will provide in-depth training for citizen volunteers (58 hours of hands-on learning and 12 hours of distance-learning) and match them with host sites in the region, including parks, nature centers, non-profits, and governmental entities. Angie was part of the curriculum development committee for the project and the Washington Conservation District may host one or more stewards on behalf of EMWREP partners in 2016.

A similar program was created by the Freshwater Society in 2014 and piloted in Minnehaha Creek Watershed District (Angie also participated in curriculum development for that project). In 2015, the [MN Master Water Steward Program](#) expanded to include nine Watershed Districts in the Twin Cities Metro, including Rice Creek and Ramsey-Washington Metro. EMWREP will continue to coordinate with and encourage collaboration between the two programs.

Community events: EMWREP participated in more than a dozen local community events, either by helping to plan, sending materials, staffing a table or giving a presentation:

- Lake Phalen Freeze Fest – Feb. 7 (St. Paul)
- Tri-Lakes Lake Assoc. Mtg – Feb. 25 (Lake Elmo)
- St. Ambrose Env. Fair – March 14 (Woodbury)
- MN Wild Hockey Game – March 28 (St. Paul)
- SWWD tree planting – April 24 (Woodbury)
- Tree, rain barrel & compost bin sale – April 24-25 (Lake Elmo)
- Mahtomedi Rite of Spring – April 25
- St. Croix Summit – April 29 (Stillwater)
- White Bear Lake Arbor Day Event – May 2
- Sunfish Lake Family Event – May 16 (Lake Elmo)
- Waterfest – May 30 (Lake Phalen – St. Paul)
- Master Gardener Plant Sale – May 31 (Lake Elmo)
- Explore Your Parks Day – June 6 (Big Marine, Lake Elmo, Cottage Grove Ravine Parks)
- Brown's Creek Trail Grand Opening - June 6 (Stillwater)
- Family Means Garden Tour – July 11-12 (Baytown Twp.)
- Washington County Fair – July 29 – Aug. 1
- Minnesota State Fair – Aug. 27 – Sept. 7
- Cottage Grove Public Works Open House – Sept. 22
- Newport Community Buckthorn Pull – Oct. 24



Above: Jenn Radtke gets help from daughter Linnea and Charlie Hong to plant a tree at the SWWD Arbor Day event.

Student Programs: EMWREP participated in the following children’s education events:

- Da Vinci Festival, Stillwater ISD - Jan. 10 (2500 K-12 students and parents)
- Maplewood Middle School Field Day – May 21
- Cottage Grove Safety Camp – July 22 (200 children, ages 8-11)
- Children’s Water Festival – Sept. 30 (1300 4th grade students)

Special Mailings: EMWREP helped partners to send out special mailings during the year, including:

- BMP maintenance reminder postcard (April)
- Washington Conservation District newsletter (March & November)



Left: Postcard mailed to properties in the new BMP data base.

Newspaper articles: EMWREP contributed 73 press releases and news columns to 18 area newspapers in 2015. 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)

- Jan. 8 – Press release: Caring for your horses and your land
- March 3 – Press release: Rain barrel sale
- May 7 – Grants for shoreline restoration projects
- Aug. 27 – Pulling up docks and draining swimming pools (AIS and IDDE)
- Sept. 1 – *AIS vectors of infestation*
- Sept. 22 – *Forests and water quality*

Forest Lake Lowdown (Circulation – 13,997)

- Jan. 8 – Press release: Caring for your horses and your land
- March 3 – Press release: Rain barrel sale
- May 7 – Grants for shoreline restoration projects
- March 18 – Press release: Flowering Rush - Invasive Species in Forest Lake
- April 15 – Press release: Forest Lake AIS Meeting Story, Grant Info, and FLLA Meeting

Forest Lake Times (Circulation - 13,029)

- Jan. 8 – Press release: Caring for your horses and your land
- Jan. 29 – Press release: Turtle tunnel receives award
- Feb. 17 – *Stormwater Detective* (IDDE)
- Feb. 24 – Press release: MN Conservation Corps Apprentice

March 3 – Press release: Rain barrel sale
 March 18 – Press release: Flowering Rush - Invasive Species in Forest Lake
 March 24 – Press release: Control erosion to protect local waterways during the spring
 April 15 – Press release: Forest Lake AIS Meeting Story, Grant Info, and FLLA Meeting
 May 7 – Grants for shoreline restoration projects
 May 21 – *Explore Your Parks Day*
 June 9 – *Save the fish (AIS)*
 Aug. 4 – *Land of 10,000 buffers*
 Aug. 18 – *Summer’s last gasp* (pulling up docks and draining swimming pools)
 Aug. 27 – *Vectors of infestation (AIS)*
 Oct. 20 – *Working in partnership with Homeowners’ Associations*
 Nov. 19 – *How are the wetlands Minnesota?*
 Dec. 8 – *Iron-enhanced sand filters*
 Dec. 15 – *Salting the earth*
 Dec. 21 – *From the tip-top of Mt. Crumpit*

Hastings Star Gazette (Circulation – 5,547)

Jan. 8 – Press release: Caring for your horses and your land

Hugo Citizen (Circulation – 14,500)

Jan. 8 – Press release: Caring for your horses and your land
 March 4 – Press release: Tree and rain barrel sale
 March 24 – Press release: Control erosion to protect local waterways during the spring
 March 31 – *Lawn care*
 April 6 – Press release: Lawn care workshop in Hugo
 April 13 – Press release: Lawn care
 Aug. 18 – *Summer’s last gasp* (pulling up docks and draining swimming pools)
 Nov. 23 – *Drinking dinosaur pee* (water conservation)
 Dec. 15 – *Salting the earth*

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

Jan. 8 – Press release: Caring for your horses and your land
 Feb. 10 – *Thriving in the face of the Winter-Maker*
 Feb. 24 – Press release: MN Conservation Corps Apprentice
 Feb. 24 – *Chasing the spring*
 March 3 – *Rain barrel and tree sale*
 March 24 – Press release: Control erosion to protect local waterways during the spring
 March 31 – *Lawn care*
 May 12 – *Measuring progress toward cleaner lakes and streams*
 May 21 – Press release: WaterFest
 May 21 – *Explore Your Parks Day*
 June 2 – *Brown’s Creek Trail*
 June 9 – *Save the fish (AIS)*
 June 29 – *Family Means St. Croix Garden Tour*
 July 14 – *Heavy rains wreak havoc*
 July 20 – *Downsizing to a small backyard*
 Aug. 4 – *Land of 10,000 buffers*
 Sept. 29 – *Leaves and algae*
 Oct. 20 – *Working in partnership with Homeowners’ Associations*
 Nov. 19 – *How are the wetlands Minnesota?*
 Dec. 8 – *Iron-enhanced sand filters*

Pioneer Press (Circulation – 191,155)

Jan. 8 – Press release: Caring for your horses and your land
April 2 – Press Release: Tree planting in the South Washington Conservation Corridor
May 21 – Press release: WaterFest
May 27 – Press release: Brown's Creek Trail Opening Event & Ice Cream Social
June 16 – Press release: South Washington Watershed District 10-yr plan

Scandia Country Messenger (Circulation - 1075)

Jan. 8 – Press release: Caring for your horses and your land
Jan. 29 – Press release: Turtle tunnel receives award
Feb. 24 – Press release: MN Conservation Corps Apprentice
March 3 – Press release: Rain barrel sale
March 17 – *Local farmers adapt to improve soil health and the St. Croix River*
May 7 – Grants for shoreline restoration projects
May 21 – *Explore Your Parks Day*
May 27 – Press release: Brown's Creek Trail Opening Event & Ice Cream Social
June 9 – *Save the fish* (AIS)
June 29 – *Family Means St. Croix Garden Tour*
July 28 – *Canoeing Big Marine*
Aug. 18 – *Summer's last gasp* (pulling up docks and draining swimming pools)
Sept. 22 – *Tale of the trees*
Dec. 15 – *Salting the earth*

South Washington County Bulletin (Circulation - 8616)

Jan. 8 – Press release: Caring for your horses and your land
Feb. 24 – Press release: MN Conservation Corps Apprentice
Feb. 24 – *Groundwater research*
Feb. 24 – *Chasing the spring*
March 3 – Press release: Rain barrel sale
March 4 – Press release: Tree and rain barrel sale
March 24 – Press release: Control erosion to protect local waterways during the spring
March 31 – *Lawn care*
April 2 – Press Release: Tree planting in the South Washington Conservation Corridor
April 7 – *Earth Day and Arbor Day*
April 8 – Press release: Green grass and smart sprinkling
April 27 – *Planting for future generations*
May 21 – Press release: WaterFest
May 27 – Press release: Brown's Creek Trail Opening Event & Ice Cream Social
June 9 – *Save the fish* (AIS)
June 16 – Press release: South Washington Watershed District 10-yr plan
June 29 – *Family Means St. Croix Garden Tour*
July 14 – *Heavy rains wreak havoc*
Aug. 4 – *Land of 10,000 buffers*
Aug. 6 – *Water reuse projects*
Aug. 25 – *Headwaters of the Mississippi*
Aug. 27 – *Vectors of infestation* (AIS)
Sept. 29 – *Leaves and algae*
Oct. 12 – *Calling all ninja warriors* (buckthorn)
Oct. 20 – *Working in partnership with Homeowners' Associations*
Oct. 27 – *Pulling together*
Nov. 19 – *How are the wetlands Minnesota?*

Nov. 23 – *Drinking dinosaur pee* (water conservation)
Nov. 23 – Press Release; MAWD 2015 Conference
Dec. 8 – *Iron-enhanced sand filters*
Dec. 15 – *Salting the earth*

Star Tribune (Circulation – 351,886)

April 2 – Press Release: Tree planting in the South Washington Conservation Corridor
June 16 – Press release: South Washington Watershed District 10-yr plan

St. Croix 360 (On-line: 25,040 followers)

March 17 – *Local farmers adapt to improve soil health and the St. Croix River*
Dec. 7 – *Lakeland bluff project*

St. Croix Lowdown (Circulation – 5000)

March 4 – Press release: Tree and rain barrel sale
May 27 – Press release: Brown's Creek Trail Opening Event & Ice Cream Social

Stillwater Current (On-line: 45,000 website visitors/month)

May 27 – Press release: Brown's Creek Trail Opening Event & Ice Cream Social

Stillwater Gazette (Circulation - 3118)

Jan. 8 – Press release: Caring for your horses and your land
Jan. 29 – Press release: Turtle tunnel receives award
Feb. 24 – Press release: MN Conservation Corps Apprentice
March 3 – Press release: Rain barrel sale
May 27 – Press release: Brown's Creek Trail Opening Event & Ice Cream Social
Nov. 23 – Press Release; MAWD 2015 Conference

Valley Life (Circulation - 17,479)

Jan. 6 – *Minnesota Fairytale*
Jan. 13 – *Groundwater*
Feb. 3 – *Wild Ones Native Plant Conference*
Feb. 10 – *Thriving in the face of the Winter-Maker*
Feb. 17 – *Stormwater Detective* (IDDE)
Feb. 24 – *Chasing the spring*
March 3 – *Rain barrel and tree sale*
March 10 – *Spring cleaning and battling mud*
March 17 – *Local farmers adapt to improve soil health and the St. Croix River*
March 24 – *St. Croix Summit*
March 31 – *Lawn care*
April 7 – *Earth Day and Arbor Day*
April 14 – *The release of Hector the Toad*
April 21 – *Water monitoring*
April 27 – *Planting for future generations*
May 5 – *Changing climate*
May 12 – *Measuring progress toward cleaner lakes and streams*
May 19 – *Getting outside*
May 21 – *Explore Your Parks Day*
June 2 – *Brown's Creek Trail*
June 9 – *Save the fish* (AIS)
June 16 – *Brown's Creek Watershed District*

June 24 – *Creating healthy habitat for fish*
 June 29 – *Family Means St. Croix Garden Tour*
 July 7 – *Bad air, bad water*
 July 14 – *Heavy rains wreak havoc*
 July 20 – *Downsizing to a small backyard*
 July 28 – *Canoeing Big Marine*
 Aug. 4 – *Land of 10,000 buffers*
 Aug. 6 – *Water reuse projects*
 Aug. 18 – *Summer’s last gasp*
 Aug. 25 – *Headwaters of the Mississippi*
 Aug. 27 – *Vectors of infestation (AIS)*
 Sept. 8 – *Household hazardous waste*
 Sept. 10 – *Minnesota fishing*
 Sept. 22 – *Tale of the trees*
 Sept. 29 – *Leaves and algae*
 Oct. 12 – *Calling all ninja warriors (buckthorn)*
 Oct. 20 – *Working in partnership with Homeowners’ Associations*
 Oct. 27 – *Pulling together*
 Nov. 10 – *Lakeland bluff project*
 Nov. 17 – *In other news*
 Nov. 19 – *How are the wetlands Minnesota?*
 Nov. 23 – *Drinking dinosaur pee (water conservation)*
 Dec. 8 – *Iron-enhanced sand filters*
 Dec. 15 – *Salting the earth*
 Dec. 21 – *From the tip-top of Mt. Crumpit*

White Bear Press (Circulation – 19,331)

Feb. 24 – Press release: Spring landscape workshop, March 7
 Nov. 23 – *Drinking dinosaur pee (water conservation)*
 Dec. 15 – *Salting the earth*

Woodbury Bulletin (Circulation - 7811)

Jan. 8 – Press release: Caring for your horses and your land
 Feb. 24 – *Groundwater research*
 March 7 – *Chasing the spring*
 March 3 – Press release: Rain barrel sale
 March 4 – Press release: Tree and rain barrel sale
 March 24 – Press release: Control erosion to protect local waterways during the spring
 March 31 – *Lawn care*
 April 2 – Press Release: Tree planting in the South Washington Conservation Corridor
 April 7 – *Earth Day and Arbor Day*
 April 8 – Press release: Green grass and smart sprinkling
 April 27 – *Planting for future generations*
 May 27 – Press release: Brown’s Creek Trail Opening Event & Ice Cream Social
 June 9 – *Save the fish (AIS)*
 June 16 – Press release: South Washington Watershed District 10-yr plan
 June 29 – *Family Means St. Croix Garden Tour*
 July 14 – *Heavy rains wreak havoc*
 Aug. 4 – *Land of 10,000 buffers*
 Aug. 6 – *Water reuse projects*
 Aug. 25 – *Headwaters of the Mississippi*

Aug. 27 – *Vectors of infestation* (AIS)
Sept. 29 – *Leaves and algae*
Oct. 12 – *Calling all ninja warriors* (buckthorn)
Oct. 20 – *Working in partnership with Homeowners' Associations*
Oct. 27 – *Pulling together*
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Dec. 8 – *Iron-enhanced sand filters*
Dec. 15 – *Salting the earth*

City newsletter articles: Information about stormwater pollution, water resources and EMWREP partner activities reached more than 175,000 people through community newsletters in 2015.

Below are some of the topics covered in these newsletters:

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

- Make'n'Take Rainbarrel Workshop - Woodbury
- Pollinator Landscaping Tips
- AIS - What you can do
- Fall clean-ups for clean water
- Household Hazardous Waste

Bayport (pop. 3200)

- AIS - What you can do
- Fall clean-ups for clean water
- Household Hazardous Waste

Baytown Twp. (pop. 1723)

Birchwood (pop. 875) - [newsletter](#)

- Fall clean-ups for clean water

Cottage Grove (pop. 34,000) - [newsletter](#)

- Make'n'Take Rainbarrel Workshop – Woodbury
- Pollinator Landscaping Tips
- AIS - What you can do
- Fall clean-ups for clean water
- Household Hazardous Waste

Dellwood (pop. 1063)

Denmark Twp. (pop. 1737)

Forest Lake (pop. 18,957)

- AIS - What you can do
- Fall clean-ups for clean water

Grant (pop. 4026)

- Fall clean-ups for clean water
- Household Hazardous Waste

Hastings (pop. 22,424)

Hugo (pop. 14,000) - [newsletter](#)

- Fall clean-ups for clean water

Lake Elmo (pop. 7647) - [newsletter](#)

- Make'n'Take Rainbarrel Workshop – Oakdale
- Pollinator Landscaping Tips
- Fall clean-ups for clean water
- Household Hazardous Waste

- Lake Elmo Fresh – e-newsletter
 - Make'n'Take Rainbarrel Workshop - Oakdale
 - Pollinator Landscaping Tips
 - AIS - What you can do
 - Fall clean-ups for clean water
- Lake St. Croix Beach (pop. 1051) - [newsletter](#)
 - Make'n'Take Rainbarrel Workshop - Woodbury
 - Pollinator Landscaping Tips
 - AIS - What you can do
 - Household Hazardous Waste
 - Fall clean-ups for clean water
- Lakeland (pop. 1830) - [newsletter](#)
 - Pollinator Landscaping Tips
 - AIS - What you can do
 - Fall clean-ups for clean water
 - Household Hazardous Waste
- Lakeland Shores (pop. 355) – [newsletter](#)
 - Fall clean-ups for clean water
- Landfall (pop. 741)
 - Pollinator Landscaping Tips
 - Fall clean-ups for clean water
 - Household Hazardous Waste
- Mahtomedi (pop. 8000) - [newsletter](#)
 - Make'n'Take Rainbarrel Workshop - Oakdale
 - Fall clean-ups for clean water
- Maplewood (pop. 39,337) – [newsletter](#)
 - Make'n'Take Rainbarrel Workshop - Oakdale
 - Fall clean-ups for clean water
- Marine on St. Croix (pop. 700) – [newsletter](#)
 - Fall clean-ups for clean water
- May Twp. (pop. 761)
 - Pollinator Landscaping Tips
 - Fall clean-ups for clean water
 - Household Hazardous Waste
- Newport (pop. 3435) - [newsletter](#)
 - Pollinator Landscaping Tips
 - Fall clean-ups for clean water
 - Household Hazardous Waste
- North St. Paul (pop. 11,694) – [newsletter](#)
 - Make'n'Take Rainbarrel Workshop - Oakdale
 - Pollinator Landscaping Tips
 - AIS - What you can do
 - Fall clean-ups for clean water
 - Household Hazardous Waste
- Oakdale (pop. 27,726) – [newsletter](#)
 - Make'n'Take Rainbarrel Workshop - Oakdale
 - Fall clean-ups for clean water
- Oak Park Heights (pop. 4724) - [newsletter](#)
 - Rain barrel sale
 - Fall clean-ups for clean water
- Pine Springs (pop. 408)
 - Pollinator Landscaping Tips
 - Fall clean-ups for clean water
- Scandia (pop. 3934) - [newsletter](#)
 - Fall clean-ups for clean water

- 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
- St. Mary's Point (pop. 370)
- St. Paul Park (pop. 5332) - [newsletter](#)
- 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
- Willernie (pop. 511)
- Woodbury (pop. 57,345) - [newsletter](#)
 - Make'n'Take Rainbarrel Workshop – Woodbury
 - Fall clean-ups for clean water

Radio programming: On Feb. 26, Angie Hong talked about water conservation and stormwater pollution prevention on the [Karin Housley Network – KLBB Radio](#), a local station serving the St. Croix Valley.

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

- **Washington Conservation District:** www.mnwcd.org receives about 13,000 visits per year
- **Facebook:** WCD has 264 followers on Facebook
- **Twitter:** @EMWREP has 151 followers and @angiehongwater has 270 followers
- **East Metro Water Blog:** www.eastmetrowater.areavoices.com had 7042 visits in 2015
- **Advertising:** EMWREP purchased Facebook advertising for its “Green Grass and Smart Sprinkling” workshops in Woodbury and Hugo:
 - Hugo: 3581 people reached, 54 web clicks
 - Woodbury: 3069 people reached, 50 clicks



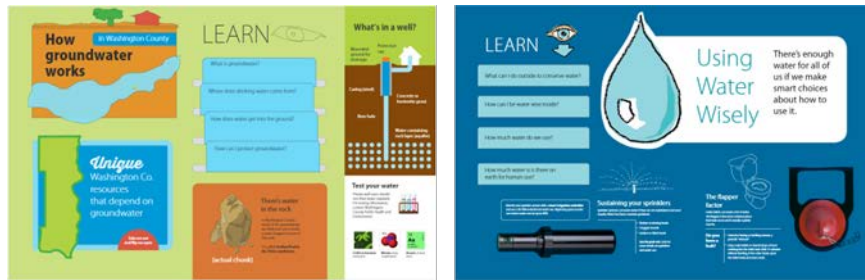
Special Projects: In 2015, EMWREP also continued or initiated several new public education efforts, including:

Continuing outreach with Homeowners' Associations

- EMWREP continued to reach out to new HOAs in Washington County to line-up stormwater improvement projects for the Green Communities Clean Water Grant. In addition to meeting with residents on-site, EMWREP staff gave presentations to:
 - Carver Lake Townhomes – Woodbury (RWMWD)
 - Colby Lake 33rd Company HOA – Woodbury (SWWD)
 - Lake Ridge Townhomes (1) – Woodbury (RWMWD)
 - Oak Glen HOA – Stillwater (MSCWMO)
 - Oak Marsh HOA – Oakdale (SWWD)
 - Pioneer Point HOA – Forest Lake (CLFLWD)
 - Lakeside Woods HOA – Forest Lake (CLFLWD)
- Currently projects are underway for Lake Ridge Townhomes (2), Evergreen Country Homes (Woodbury – RWMWD), and Colby Lake 33rd Company.

Doing more education about groundwater and water conservation

- EMWREP partnered with Master Gardeners to offer “Green Grass & Smart Sprinkling” Workshops in Hugo (April 28) and Woodbury (April 21) to teach homeowners about lawn care, conserving groundwater, and protecting surface water resources. Approximately 30 people attended the two workshops.
- During the year, we worked with Washington County Public Health and Environment to develop two new table-top displays about groundwater and water conservation to use at community events. The displays will be available for EMWREP partners and other community groups to borrow as well.
- We partnered with Recycle MN to sell rain barrels and compost bins during the WCD annual Tree Sale in April and with Cedar Hill Natives to conduct Make ‘n’ Take rain barrel workshops in Oakdale (May 18) and Woodbury (May 19).
- EMWREP is helping Valley Branch Watershed District to inform Afton residents about e. coli contamination in Kelle’s Creek due to failing septic systems and will be providing outreach support for VBWD’s Clean Water grant to conduct voluntary septic inspections in the area.
- EMWREP has also provided support for a project led by Washington Conservation District, Washington County, and MN Department of Agriculture to test private wells in Cottage Grove and Denmark Twp. for nitrates.



Above: Images from the two new groundwater-themed education displays.

Building relationships with Lake Associations

- On Sept. 23, EMWREP partners - as well as VLAWMO, and Chisago and Ramsey Conservation Districts - hosted a meeting for Lake Associations. During the meeting, lake association members learned about local AIS (aquatic invasive species) prevention and treatment efforts and participated in small group conversations. People expressed an interest in meeting twice per year to network and learn about issues related to lakes, and requested that EMWREP partners provide educational materials and information about AIS for them to share with their neighbors.
- Since the meeting, we have developed an email list to stay in touch with Lake Associations and have shared information about statewide gatherings for lake associations and Washington County’s AIS grant fund availability.



Above: Lake Association members learned about aquatic invasive species at a meeting in September.

Engaging citizens in watershed activities and plan updates

- We worked with Brown's Creek Watershed District to develop a citizen survey and organize an ice cream social in conjunction with the Brown's Creek Trail grand opening. About 150 people attended the event, which was held at Brown's Creek Park in Stillwater on June 16 and 77 completed surveys while they were there. The event also highlighted stream improvement projects along the new trail.
- For the past six months, EMWREP has been helping Comfort Lake – Forest Lake Watershed District to reinvigorate its Citizen Advisory Committee by developing recruitment materials and participating in monthly meetings.
- EMWREP helped Middle St. Croix WMO to hold an open house event in Bayport for its Watershed Plan Update.



Above: Community members gather to celebrate the completion of the Brown's Creek Trail in Stillwater.

Supporting water education for area youth

- Though EMWREP does not have a K-12 education program, we help to support teacher trainings, curriculum development, and youth education events conducted by other organizations in our area.
- Examples of events that EMWREP participated in in 2015 include the Maplewood Middle School Field Day, Children's Water Festival, and Cottage Grove Safety Camp.
- Angie participated in the curriculum development committee for the new [K-12 version of the Watershed Game](#), a project led by Minnesota Extension and Minnesota Sea Grant. The game is designed for 7th and 8th grade students, and can be used in a classroom or informal education setting. The game materials, supporting curriculum, and out-of-classroom extensions are available on-line. EMWREP also has one hard-copy of the game available for partners to borrow.
- Angie also met with teachers at the [St. Croix River Institute](#), a continuing education training led by Hamline University every year.
- Jenn Radtke created a new Water Pollution "Camp Clue" outdoor lesson to teach children about common sources of non-point source water pollution; we used the lesson with two groups of 50 kids at Cottage Grove Safety Camp.
- EMWREP also modified some of its adult education workshops in 2015 to make it easier for families with young children to attend. At the lawn care workshops in Hugo and Woodbury, for example, we had several kids activities set up in the back of the room to keep kids entertained while their parents learned.

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 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. EMWREP chose to step out of the partnership during 2015 but will be joining again in 2016.

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 2015, EMWREP conducted raingarden design workshops in Bayport and Marine on St. Croix, and held raingarden maintenance workshops in Lake Elmo and Stillwater. EMWREP also worked with WCD staff and South Washington Watershed District to hold a raingarden design charrette during the fall.

- Raingarden design workshops
 - Bayport – April 13
 - Marine on St. Croix - April 14
 - Oakdale – Sept. 15
- Raingarden maintenance workshops
 - Lake Elmo – May 13
 - Stillwater – May 18

Neighborhood Parties: EMWREP helped to coordinate two neighborhood gatherings in 2015:

- Stillwater, Feb. 18: Lily Lake neighborhood party
- Oakdale, Aug. 4: Evening in the Garden
 - Co-hosted by Marge Sagstetter, a local Master Gardener. Approximately 50 people attended.

Presentations:

- League of Women Voters – Woodbury, Feb. 18
- Master Gardener Landscaping workshop – Woodbury, Oct. 3

Targeted homeowner outreach: EMWREP did not do any targeted homeowner outreach for partners in 2015.

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 2015:

- 292 site visits
- 31 new projects installed; 14 projects from previous years completed
- 97.5 pounds of phosphorus (P) captured by all projects installed in 2015
- 19,389 pounds of total suspended solids (TSS) captured by all projects in 2015

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 use at community events and loan out to EMWREP partners and community groups.

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.

2015 Conservation Project Survey: During January of 2015, EMWREP conducted a survey of 433 people who had attended workshops, scheduled site visits, or completed conservation projects with WCD or Watershed District assistance between 2010 and 2015. A total of 82 people responded (19% response rate). EMWREP conducted a similar survey in 2010.

Key findings from the 2015 survey include the following:

- Survey respondents were older and richer than the general population in Washington County. (The age factor could be partially explained by survey bias.)
- Of the people who attended our workshops:
 - 45% scheduled a site visit
 - 35% received a grant for a project
 - 55% installed a project
- In general, people who build conservation projects are motivated to protect water resources and improve their yards and local environment. Common barriers include time, funding, and communications during the grant process.
- People like our programs, and especially our BMP staff.
- The most common complaints are about staff availability and communications (i.e. waiting to schedule a site visit or learn if a grant application was approved)
- People want us to advertise, educate and promote our work more.

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

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.

Horse owner's workshop: Washington County has the most horses of any county in Minnesota and horse owners and boarders generally do not qualify for agricultural assistance programs because they are not considered producers. EMWREP hosted a workshop on Jan. 27 that 40 people attended. Topics included proper saddle fit, and horse nutrition, as well as assistance available for erosion control and other clean water projects.

Nitrates Water Testing: During 2015, Washington Conservation District and Washington County continued reaching out to landowners with private wells in Cottage Grove and Denmark Twp. as part of an initiative to test for nitrates contamination. EMWREP provided outreach support.

Support for targeted implementation projects: During 2015, EMWREP provided outreach assistance for targeted implementation projects, including:

- Washington Conservation District – Turf to Native project
 - A grant project to help landowners along the St. Croix River with more than one acre of lawn convert their turf to native prairie
- Washington Conservation District – Top50P!
 - A grant project to identify fifty of the biggest sources of phosphorus to the St. Croix River in rural portions of Washington County and work with willing landowners to install clean water practices

The WCD held informational breakfasts on March 4 in Scandia and March 5 in Denmark Twp. for farmers and other large landowners to learn about conservation programs and grants.

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. Washington Conservation District is coordinating outreach for Top50P! and other rural lands projects with Watershed District BMP programs.

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

Evaluation: During 2015, 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.



Above: Rural landowners in Scandia learn about new conservation grant programs.

Blue Biz

Helping local businesses go blue

Minimum Control Measure Addressed

<input checked="" 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: Commercial property owners, business owners, property managers and commercial developers

Program Goals:

1. Promote stormwater BMP’s for businesses in targeted areas within EMWREP partner communities.
2. Encourage use of LID techniques for new commercial development.
3. Coordinate commercial outreach with partner BMP programs and TMDL implementation.
4. Publicize and utilize demonstration projects created by the program to increase educational benefit. Create signage, conduct tours and highlight demonstration projects.

Educational Goals:

Learning

1. Help business owners, property managers and commercial developers to understand that impervious surfaces on commercial properties contribute significantly to stormwater pollution in local water bodies.
2. Increase understanding of best management practices and low impact development techniques.

Behavior Change

1. Engage commercial entities in preventing non-point source water pollution.
2. Involve local businesses as active partners in watershed and TMDL plan implementation.
3. Increase the utilization of BMP’s and LID by local businesses.

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:

Website: EMWREP has a website (www.cleanwatermn.org/businesses) where commercial entities can go to find information about Low Impact Development and BMP’s, as well as case studies and links to resources for cost-share and technical assistance.

Print materials: EMWREP has a one-page fact sheet that summarizes information available on the website and several one-pg fact sheets about local commercial BMP projects. These print materials are available for business owners when BMP staff meets one-on-one to discuss conservation projects.

Targeted outreach: EMWREP did not do any targeted outreach to businesses in 2015.

Coordination: EMWREP will continue to coordinate outreach efforts with partner BMP programs.

Evaluation: EMWREP did not conduct any audience research or evaluation with business owners in 2015.

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 2015, 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.

Hosting and developing new workshops: EMWREP co-hosted the following workshops:

- *Turfgrass Maintenance* – April 10, Oakdale (23 participants)
 - Co-sponsored by Minnesota Pollution Control Agency, Fortin Consulting, and Ramsey-Washington Metro WD.
 - Workshop is designed for city and county employees who maintain grounds and parks, contractors who maintain private and public grounds, and church and school employees responsible for grounds maintenance
 - Topics covered during the workshop included equipment calibration, selection and application of fertilizers, mowing techniques, weed control and pesticide application tips, best practices in aeration, environmental effects on land and water, legal issues
 - Staff from the following EMWREP area communities and businesses attended:
 - Lake Elmo
 - Little Canada
 - Mahtomedi
 - Newport
 - North St. Paul
 - Stillwater
 - White Bear Lake
 - Woodbury
- *Stormwater Practices Maintenance and Inspection* – May 5-6, Cottage Grove
 - Led by U of MN Stormwater Management Certification Program
 - A one-day course for those who inspect, maintain or direct maintenance on stormwater control measures and practices, such as ponds and infiltration systems.
 - Workshops covered fundamentals of BMP processes, mechanics, inspections, operations and maintenance needs, and how to create and execute an inspection maintenance work plan.
- *Erosion Control Seminar* – Sept. 29, Cottage Grove
 - Co-hosted with Minnesota Erosion Control Association (MECA) and
 - U of M Erosion and Sediment Control Program
 - Vendors demonstrated new materials and technologies, including erosion control blankets, storm drain inlet protection, and sediment removal products for turbidity reduction.

Presentations: During 2015, EMWREP also completed and distributed a set of short 10-min PowerPoint presentations for EMWREP’s municipal partners to use:

- Waste disposal and storage, including dumpsters;
- Management of temporary and permanent stockpiles of materials such as street sweepings, snow, deicing materials (e.g., salt), sand and sediment removal piles;
- Vehicle fueling, washing and maintenance;
- Routine street and parking lot sweeping;
- Emergency response, including spill prevention plans;
- Cleaning of maintenance equipment, building exteriors, dumpsters, and the disposal of associated waste and wastewater;
- Use, storage, and disposal of significant materials;
- Road maintenance, including pothole repair, road shoulder maintenance, pavement marking, sealing, and repaving;
- Right-of-way maintenance, including mowing; and
- Application of herbicides, pesticides, and fertilizers.

Evaluation: Workshop evaluations were used to measure learning at the professional trainings conducted by Fortin Consulting and the U of M Erosion and Sediment Control Program. Participants at the Turfgrass Workshop were also given the opportunity to take an optional exam to become certified by the MPCA for environmentally friendly lawn care practices.

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 2015, EMWREP co-organized two trainings for local elected officials in partnership with Minnesota Extension NEMO (Nonpoint Education for Municipal Officials) and other partners.

- *St. Croix River Workshop on the Water: Aug. 6*
 - This year’s workshop was designed for newly elected and appointed leaders, those who had not participated in past year’s workshops, and communities participating in the Minimal Impact Design Standards (MIDS) Community Assistance Project.
 - Topics included water quality; policies, plans and practices to protect water resources; groundwater and surface water interaction; and stormwater BMPs.
 - 77 local elected and appointed officials and community leaders participated along with approximately 23 experts and staff.



Left: Local leaders listen to National Park Superintendent Chris Stein talk about the St. Croix River.



Right: Decision makers in Forest Lake visit a stormwater treatment facility.

- *Protecting and improving lakes and streams in Forest Lake: Sept. 1*
 - This workshop brought together the Forest Lake City Council, key staff, and commission members with members of the Clear and Forest Lake Lake Associations, and CLFLWD and RCWD board and staff. County Commissioner Fran Miron also attended, as did staff from Board of Water and Soil Resources.
 - Local leaders identified the need and interest for more information and training on the following:
 - Enhanced street sweeping
 - MIDS
 - Water reuse
 - City comprehensive plan updates, integration of stormwater plan, land use planning, integration with watershed district plans
 - MS4 policies, ordinances, requirements, plan

St. Croix Basin Minimal Impact Design Standards (MIDS) grant project: EMWREP continued to provide support for the MIDS St. Croix Community Assistance project in 2015.

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 workshop on the water indicated the program greatly enhanced their knowledge and understanding in four areas:

1. The water quality and health of the St. Croix River;
2. Land use impacts along the riverbank and shorelines;
3. Watershed land use changes and impacts from impervious surfaces and stormwater runoff; and
4. Surface water and groundwater connections.

Evaluations from the Forest Lake Workshop showed increased knowledge and understanding of stormwater management practices and water quality projects within the City of Forest Lake, their benefits, and the need for the investment in these projects (4.5 on a 5-point learning scale).

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: The MS4 toolkit is hosted on the Clean Water MN website at www.cleanwatermn.org. The on-line kit includes training materials to help MS4 entities and EMWREP partners meet the six minimum control measures outlined in the MS4 permit:

- [Public education](#) and Public engagement
- [Illicit discharge detection and elimination](#)
- [Construction site stormwater control](#)
- [Post-construction stormwater management](#)
- [Municipal operations and good housekeeping](#)

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

APPENDIX A: EDUCATION PROGRAM BUDGET FOR 2013-2015

**Shared Water Resource Education Program
Annual Budget**

Staff Support (2650 hours/year)	Materials	Total
\$120,900	\$6,000	\$126,900

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	\$22,000
VBWD	\$16,750
BCWD	\$16,750
CLFLWD	\$16,750
CMSCWD	\$11,000
RWMWD	\$11,000
RCWD	\$2,225
Washington County	\$11,000
MSCWMO	\$5,500
Cottage Grove	\$2,225
Forest Lake	\$2,225
Lake Elmo	\$2,225
Stillwater	\$2,225
Woodbury	\$2,225
Dellwood	\$560
Grant	\$560
Newport	\$560
Willernie	\$560
West Lakeland Twp	\$560
	\$126,900.00

*The table above shows funding contributions for EMWREP members during 2015.