

## Appendix B

East Metro Water Resource Education Program (EMWREP) 2014 Annual Report



# 2014 Annual Report



Above: A Lake Elmo area Girl Scout troop pulls weeds during a raingarden maintenance workshop.

## 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 • Lake Elmo • Middle St. Croix Watershed •  
Ramsey-Washington Metro Watershed • Rice Creek Watershed • Stillwater •  
South Washington Watershed • Valley Branch Watershed • Willernie •  
West Lakeland • Woodbury • Washington Conservation District • Washington County

**East Metro Water Resource Education Program  
2014 Annual Report**

TABLE OF CONTENTS

<a href="#">About the Program</a> .....	3
<a href="#">2014 Executive Summary</a> .....	4
Program Activities and Evaluation	
<a href="#">General Education Program</a> .....	7
<a href="#">Blue Thumb – Planting for Clean Water</a> .....	17
<a href="#">Rural Outreach</a> .....	21
<a href="#">Blue Biz – Helping Local Businesses go Blue</a> .....	24
<a href="#">Stormwater U</a> .....	26
<a href="#">Northland NEMO</a> .....	28
<a href="#">MS4 Toolkit</a> .....	30
 <a href="#">Appendix A: Education Program Budget for 2013-2015</a> .....	 31

## **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, Lake Elmo, Stillwater, 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 18 partner organizations. The committee generally meets twice a year to provide recommendations on the program budget and activities. During 2013, 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 170 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](http://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 partnership of more than 70 public and private entities in the Upper Midwest, developed to promote the use of native plantings, raingardens and shoreline plantings to conserve water resources and reduce runoff pollution. WaterShed Partners, which manages the Clean Water Minnesota media campaign, 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.

## 2014 Executive Summary

**General Education Campaign:** During 2014, 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. Major strategies include more than 100 articles per year in local newspapers and community newsletters, ample use of social media, direct mailings to specific audiences, and participation in more than 15 community events.

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 2014, EMWREP also conducted the following special education projects:

- 1) Held a series of three focus groups with representatives from homeowners' associations (HOAs), property management companies, and lawn care companies.
- 2) Developed an e-newsletter for area congregations and new educational resources for this audience; and
- 3) Created a Clean Water Geocaching Trail to highlight partner projects.

**Blue Thumb Program:** The Blue Thumb – Planting for Clean Water program ([www.BlueThumb.org](http://www.BlueThumb.org)) was developed by the Rice Creek Watershed District in 2006 and EMWREP has been a key member since then. During 2014, the Blue Thumb partnership included more than 70 public and private entities - nurseries, landscaping companies, watershed agencies, cities, non-profits and citizen groups.

EMWREP uses Blue Thumb tools and resources, such as the website and print materials, to conduct public education and enhance outreach efforts. Last year, EMWREP:

- 1) Conducted four raingarden design workshops, one shoreline planting workshop, and two raingarden maintenance workshops;
- 2) Coordinated neighborhood gatherings in Bayport, Lake Elmo, Stillwater, Forest Lake, and Wyoming;
- 3) Supported targeted outreach efforts in Stillwater and North St. Paul / Maplewood;
- 4) Helped to promote watershed best management practices (BMP) programs; and
- 5) Contributed to the new Washington County BMP database.

EMWREP education continues to amplify the impact of partner BMP clean water programs. Out of 961 voluntary urban BMPs built in Washington County between 2007 and 2013, 115 (12%) came from people who attended Blue Thumb workshops hosted by EMWREP. Furthermore, of the 362 people who attended workshops between 2007 and 2013, 106 (29%) went on to install BMP projects on their land. In 2014, BMP program staff reported:

- 233 site visits
- 33 new projects installed; 34 projects from previous years completed
- 68.75 pounds of phosphorus (P) captured by all projects installed in 2014
- 58,122 pounds of total suspended solids (TSS) captured by all projects in 2014

**Rural Outreach:** During 2014, EMWREP offered several programs specifically designed to engage rural property owners. These included a workshop for horse owners, a cover crop field seminar, and support for nitrates well water testing in southern Washington County. In addition, EMWREP also provided outreach support for targeted implementation efforts, including Washington Conservation District's Turf to Prairie and Top50P! projects.

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

**Stormwater U:** In 2014, 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) Innovation in Stormwater Best Management Practices;
- 2) Erosion and Sediment Control Inspections and Enforcement; and
- 3) P8 Modeling

During 2014, EMWREP also developed a series of ten 10-minute PowerPoint presentations for 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 2014, EMWREP collaborated with several other partners to hold the fifth annual *Workshop on the Water* for St. Croix Basin communities in Minnesota and Wisconsin. Nearly 120 people attended. EMWREP also provided support for a grant project to help communities in Washington County adopt Minimal Impact Design Standards, including conducting a special workshop for city attorneys. In addition, EMWREP staff presented to the Oakdale Environmental Commission and helped to coordinate Washington County Water Consortium activities.

**MS4 Toolkit:** EMWREP developed the MS4 Toolkit ([www.cleanwatermn.org/MS4toolkit](http://www.cleanwatermn.org/MS4toolkit)) several years ago with a grant from the Minnesota Pollution Control Agency. The toolkit includes educational materials that partners can use to meet the six minimum control measures in the MS4 permit, such as brochures, posters, slide shows, training videos and more. In addition to the on-line materials, training videos for parks and public works staff and pop-up banners for community events are available partners to borrow. The Metro WaterShed Partners MS4 work group is currently discussing strategies for updating the MS4 Toolkit and website.

**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 governmental, non-profit, private and citizen partners to engage the public, promote and execute 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 18 partnering entities within EMWREP, as well as other LGUs inside and outside of Washington County;
- Non-profits: St. Croix River Association, Friends of the Mississippi River, Family Means, local nature centers, sportsman groups;
- Private partners: Corporations such as 3M and Blue Cross – Blue Shield; and
- Citizens: Master Gardeners, church members, and other community leaders.

**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:

- St. Croix Basin Conference – April 8 (River Falls)
- Mahtomedi Rite of Spring – April 26
- Waterfest – May 31 (Lake Phalen)
- Landscape Revival – May 31 (Roseville)
- Explore Your Parks Day – June 7 (Lake Elmo Regional Park)
- Master Gardener Plant Sale – June 2 (Lake Elmo)
- Belwin Bison Release – June 14 (Afton)
- Family Means Garden Tour – July 12-13 (Stillwater)
- Washington County Fair – July 30 – Aug. 3
- Heritage Day – Aug. 5 (Lake St. Croix Beach)
- Minnesota State Fair – Aug. 21 – Sept. 1
- Warner Nature Center Open House – Oct. 5
- Newport Community Buckthorn Pull – Oct. 25

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

- Da Vinci Festival, Stillwater ISD - Jan. 5 (2500 K-12 students and parents)
- MN Youth Outdoor Expo, Hugo, May 18-19 (2500 children and parents)
- OH Anderson Field Day, Mahtomedi – May 10 (100 3<sup>rd</sup>-5<sup>th</sup> grade students)
- Cottage Grove Safety Camp – July 9 (200 children, ages 8-11)



Above: WaterShed Partners exhibits at Minnesota State



Above: During Safety Camp, the kids created maps of the Mississippi River in South Washington County.



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

- Mailings to Comfort Lake – Forest Lake and Carnelian-Marine-St. Croix Watersheds to promote the Aquatic Invasive Species workshop and watershed cost-share programs (February)
- Washington Conservation District newsletter (March & November)
- Mailing to the Croixwood neighborhood (Stillwater) in Brown’s Creek Watershed, for a neighborhood raingarden project (May)

**Newspaper articles:** EMWREP coordinator Angie Hong writes regularly for several local papers. Read the articles on-line at [www.eastmetrowater.areavoices.com](http://www.eastmetrowater.areavoices.com). Education assistant Jenn Radtke also sends news articles and press releases to papers. In 2014, the following articles were sent to or published in area papers:



**Chisago County Press**

- Feb. 19 – Press release: Aquatic Invasive Species (AIS) workshop
- May 22 – *Native plants keep bees buzzing*
- June 12 – *Stopping the nitrogen superhighway*

**Forest Lake Press (5258 readers)**

- Feb. 19 – Press release: Aquatic Invasive Species (AIS) workshop
- July 8 – Press release: Clean Water Geocaching Trail
- Aug. 4 – Press release: Forest Lake shoreline neighborhood event
- Sept. 8 – Press release: Washington County septic replacement loan program

**Forest Lake Times (13,029 readers)**

- Feb. 11 – Press release: Over \$1 million in Clean Water grants for Washington Co., 2014
- Feb. 19 – Press release: Aquatic Invasive Species (AIS) workshop
- Feb. 27 – *The battle of the invasives* (AIS workshop)
- May 15 – Press release: MASWCD Day at the Capitol
- June 12 – *Stopping the nitrogen superhighway*
- June 18 – *Safe passage for turtles*
- July 2 – *A plea for sane lawn watering*
- July 8 – Press release: Clean Water Geocaching Trail
- Aug. 4 – Press release: Forest Lake shoreline neighborhood event
- Aug. 19 – *Failing septic systems contaminate area streams and lakes*
- Sept. 8 – Press release: Washington County septic replacement loan program
- Nov. 4 – *Fall chores* (leaf raking and water quality)

**Hastings Star Gazette (34,614 subscribers)**

- July 25 – *Where the Mississippi River wanders*
- Aug. 19 – *Failing septic systems contaminate area streams and lakes*

**Hugo Citizen (10,000 readers)**

- Feb. 27 – *The battle of the invasives* (AIS workshop)
- April 4 – *Local cities adapt to changing groundwater availability*
- May 15 – Press release: MASWCD Day at the Capitol
- May 27 – *Native plants keep bees buzzing*
- June 12 – *Stopping the nitrogen superhighway*

June 18 – *Safe passage for turtles*  
Aug. 21 – Column: *The year the lawn didn't sleep*  
Sept. 17 – Column: *In search of Hardwood Creek*  
Oct. 16 - Press Release: WCD Board visits White Bear Yacht Club and other conservation projects  
Dec. 16 – Column: *Under the ice aquatic life*

**Oakdale- Lake Elmo & Maplewood – North St. Paul Reviews** (10,873 readers)

Feb. 5 – *Healing from groundwater contamination in Washington County* (PFC monitoring project in Oakdale and Lake Elmo)  
Feb. 21 – *Get gardening* (Raingarden workshops on March 4 and 11)  
April 4 – *Local cities adapt to changing groundwater availability*  
May 15 – Press release: MASWCD Day at the Capitol  
May 15 – *WaterFest and Explore Your Parks Day*  
May 22 – *Native plants keep bees buzzing*  
June 2 – *Lake report for Valley Branch Watershed*  
June 12 – *Stopping the nitrogen superhighway*  
June 18 – *Safe passage for turtles*  
June 27 – *Get inspired at the Family Means St. Croix Garden Tour*  
July 2 – *A plea for sane lawn watering*  
July 21 – *Monarchs in the trees* (An Evening in the Big Backyard event in Lake Elmo)  
Aug. 4 – *Grimy, green and gross*  
Aug. 19 – *Failing septic systems contaminate area streams and lakes*  
Sept. 2 – *A refresher course on sewers and pipes*  
Sept. 17 – Review article: Big Backyard workshop in Lake Elmo and Juran gardens  
Sept. 30 – *Goosy, goosy, gander*  
Nov. 4 – *Fall chores*  
Nov. 6 – *Exploring the new Brown's Creek Trail*  
Nov. 25 – *Wearing high heels in the winter* (salt and water quality)  
Dec. 22 – Minnesota lakes

**Pioneer Press** (308,860 daily readers / 511,190 Sunday readers / 2.7 million on-line visitors)

Feb. 11 – Press release: Over \$1 million in Clean Water grants for Washington Co., 2014

**Scandia Country Messenger** (1075 readers)

Feb. 11 – Press release: Over \$1 million in Clean Water grants for Washington Co., 2014  
Feb. 19 – Press release: Aquatic Invasive Species (AIS) workshop  
May 15 – Press release: MASWCD Day at the Capitol  
June 12 – *Stopping the nitrogen superhighway*  
July 8 – Press release: Clean Water Geocaching Trail  
July 14 - *Water monitoring data for lakes and streams in Scandia, Marine and May*  
Aug. 19 – *Failing septic systems contaminate area streams and lakes*  
Sept. 8 – Press release: Washington County septic replacement loan program  
Nov. 4 – *Farewell to the geese*

**South Washington County Bulletin** (8616 readers)

Feb. 11 – Press release: Over \$1 million in Clean Water grants for Washington Co., 2014  
April 4 – *Local cities adapt to changing groundwater availability*  
April 22 – *Happening on the St. Croix River*  
May 15 – Press release: MASWCD Day at the Capitol  
June 12 – *Stopping the nitrogen superhighway*

July 2 – *A plea for sane lawn watering*  
July 25 – *Where the Mississippi River wanders*  
Aug. 19 – *Failing septic systems contaminate area streams and lakes*  
Sept. 5 – *Explore Ravine Lake and the wetlands of Cottage Grove Ravine Regional Park*  
Oct. 20 – *The falliest fall ever* (leaf raking and water quality)  
Nov. 4 – Fall chores  
Nov. 10 – *Central Draw Project*  
Nov. 25 – *Wearing high heels in the winter* (salt and water quality)

**St. Croix 360** (local e-newspaper reaching 25,000+ people)

Aug. 27 - Middle St. Croix Watershed meeting - Sept. 2 (from Stillwater Current)  
Aug. 25 – *Obsolete septic systems spoil St. Croix streams*  
Dec. 9 – Article about conservation projects for rural landowners

**Stillwater Gazette** (6,966 readers)

April 7 – Gazette staff attended Stillwater raingarden workshop & wrote article  
May 15 – Press release: MASWCD Day at the Capitol  
May 20 - Press release: Stillwater Area High School wins State Envirothon  
June 30 –Pastor’s column: St. Peter’s Church builds raingardens and community  
Aug. 22 - Press release: Middle St. Croix Watershed meeting - Sept. 2  
Sept. 16 - Press Release: WCD Board visits Blueberry Fields and other conservation projects

**Woodbury Bulletin** (7811 readers)

April 4 – *Local cities adapt to changing groundwater availability*  
May 15 – Press release: MASWCD Day at the Capitol  
July 2 – *A plea for sane lawn watering*  
Aug. 4 – *Grimy, green and gross*  
Nov. 10 – *Central Draw Project*  
Nov. 25 – *Wearing high heels in the winter* (salt and water quality)

**Valley Life** (48,000 readers – Angie Hong has a weekly column)

Jan. 2 – *How to walk in the winter* (salt use and water quality)  
Jan. 9 – *Ten things you might not know about water resources in Washington County*  
Jan. 16 – *Where the water goes*  
Jan. 26 – *Clean Water Legacy Funding to benefit Washington County*  
Feb. 4 – *Healing from groundwater contamination in Washington County*  
Feb. 5 – *Things change* (Wild Ones native plant conference)  
Feb. 20 – *Get gardening Stillwater*  
Feb. 27 – *The battle of the invasives*  
March 10 – *Ready for the melt*  
March 18 – *The Lake Detective* (AIS workshop)  
March 25 – *Walking on water* (spring events and St. Croix River)  
March 31 – *Scooping the poop with style*  
April 4 – *Local cities adapt to changing water availability*  
April 15 – *Pharmaceuticals in Minnesota lakes*  
April 22 – *Happening on the St. Croix River*  
April 30 – *Shoreline living*  
May 6 – *Caring for your horse and your land*  
May 12 – *Searching for spring*  
May 15 – *WaterFest and Explore Your Parks Day*

May 19 – *Native plants keep bees buzzing*  
 June 2 - *VBWD lakes report*  
 June 3 – *Beware the Grecian foxglove*  
 June 11 – *Stopping the nitrogen superhighway*  
 June 13 – *Safe passage for turtles*  
 June 27 – *Get inspired at the Family Means St. Croix Garden Tour*  
 July 2 – *Plea for sane lawn watering*  
 July 14 – *Stillwater area water monitoring report*  
 July 21 – *Monarchs in the trees*  
 July 25 – *Where the Mississippi River wanders*  
 Aug. 4 – *Grimy, green and gross*  
 Aug. 11 – *Summer 2014 church raingarden tour*  
 Aug. 19 – *Failing septic systems contaminate area streams and lakes*  
 Sept. 2 – *A refresher course on sewers and pipes*  
 Sept. 5 – *Explore Ravine Lake and the wetlands of Cottage Grove Ravine Regional Park*  
 Sept. 15 – *Getting to know your neighborhood fish*  
 Sept. 30 – *Goosy, goosy, gander*  
 Oct. 9 – *Beautiful race* (water improvements on Minneapolis Chain of Lakes)  
 Oct. 20 – *The falldest fall ever* (leaf raking and water quality)  
 Oct. 22 – *Imagine how it could be*  
 Nov. 3 – *Exploring the new Brown’s Creek Trail*  
 Nov. 10 – *Central Draw Project*  
 Nov. 18 – *Finding peace by the water’s edge*  
 Nov. 25 – *Wearing high heels in the winter* (salt and water quality)  
 Dec. 2 – *Minnesota lakes*  
 Dec. 9 – *Minnesota rivers*  
 Dec. 16 – *Reducing runoff at the Oneka Ridge Golf Course*  
 Dec. 23 – *As the waterdrop roles* (summary of 2014 watershed activities)

**City newsletter articles:** Information about stormwater pollution, water resources and EMWREP partner activities reached more than 175,000 people through community newsletters in 2014. Below are some of the topics covered in these newsletters:

- Afton (pop. 2800) – [newsletter](#)
  - Jan – Tree Sale
  - March – Blue Thumb workshops
  - April - Blue Thumb and buckthorn workshops
  - May – Spring Yard Care Tips
  - June – Invasive species
  - August – Clean Water geocaching
  - September – Buckthorn
  - October – County Septic Program
- Bayport (pop. 3200) – [newsletter](#)
  - March – Planting for Clean Water
- Baytown Twp. (pop. 1723) – no newsletter
- Birchwood (pop. 875) - [newsletter](#)
- Cottage Grove (pop. 34,000) - [newsletter](#)
  - Feb – Blue Thumb workshop
  - April – Buckthorn
  - June – Groundwater

- Dellwood (pop. 1063) – annual Mayor’s Letter, not posted on-line
- Denmark Twp. (pop. 1737) – no newsletter
- Forest Lake (pop. 18,957) - [newsletter](#)
  - Winter – road salt, WCD tree sale
- Grant (pop. 4026) – twice yearly, not posted on-line
- Hugo (pop. 14,000) - [newsletter](#)
  - Spring – water conservation, abandoned well sealing
  - Fall – Oneka Ridge water reuse project
- Lake Elmo (pop. 7647) - [newsletter](#)
  - Summer – Stormwater and drinking water supplies, car wash, native plants, lawn watering
  - Fall – proper disposal of household hazardous wastes, sweep up leaves and grass clippings, lawn watering.
- Lake Elmo Fresh – e-newsletter
  - Featured several EMWREP and partner events in the Lake Elmo area
- Lake St. Croix Beach (pop. 1051) - [newsletter](#)
  - Jan – Annual Tree Sale, non-toxic cleaners
  - Feb – Annual Tree Sale, county septics program
  - March – Blue Thumb workshop
  - April – Blue Thumb workshops, rain barrels
  - May – rain barrels, spring clean-up tips
- Lakeland (pop. 1830) - [newsletter](#)
  - June, July, August – Grass clippings
  - October, November – County septic program
- Lakeland Shores (pop. 355) – [newsletter](#)
- Mahtomedi (pop. 8000) - [newsletter](#)
  - April – June: 10 Stormwater tips
  - Jan - Mar: road salt, tree sale
- Maplewood (pop. 39,337) – only current month’s newsletter posted on-line
- Marine on St. Croix (pop. 700) – [newsletter](#)
- May Twp. (pop. 761) – twice annually, not posted on-line
- Newport (pop. 3435) - [newsletter](#)
  - Spring – community buckthorn pull
  - Fall – Controlling stormwater pollution
- North St. Paul (pop. 11,694) – [newsletter](#)
  - April – spring cleaning
- Oakdale (pop. 27,726) – only current newsletter posted on-line
- Oak Park Heights (pop. 4724) - [newsletter](#)
  - First Quarter – Annual tree sale
- Pine Springs (pop. 408) – no newsletter or website
- Scandia (pop. 3934) - [newsletter](#)
- Stillwater (pop. 18,000) - [newsletter](#)
- Stillwater Twp. (pop. 3000) - [newsletter](#)
- St. Mary’s Point (pop. 370) – no newsletter

- West Lakeland (pop. 3547) - [newsletter](#)
  - Spring – County septic program,
  - Summer – Evening in the Big Backyard
- Willernie (pop. 511) – Mayor’s letter sent occasionally
- Woodbury (pop. 57,345) - [newsletter](#)
  - Feb – pet waste
  - Nov. – Water conservation, winter salt use

**Radio programming:** On March 22, Angie Hong talked about raingardens and other water-friendly planting projects on the Karin Housley Network – KLBB Radio, a local station serving the St. Croix Valley.



**Websites and Social Media:** EMWREP uses several websites to provide information and resources for the public and also uses social media, such as Facebook, Twitter and the East Metro Water blog to reach people in the community:

- **Washington Conservation District:** In 2014, the WCD website ([www.mnwcd.org](http://www.mnwcd.org)) received 7,609 visits from 5,531 visitors. The WCD has 202 Facebook “Likes” and EMWREP has 92 Twitter followers.
- **Blue Thumb – Planting for Clean Water:** The website ([www.BlueThumb.org](http://www.BlueThumb.org)) received 22,400 visits from 18,048 visitors. Blue Thumb has 956 Facebook likes and 480 Twitter followers.
- **WaterShed Partners:** The Clean Water Minnesota website ([www.cleanwatermn.org](http://www.cleanwatermn.org)) received 1691 visits from 1376 visitors. StormDrain Goalie, a new social media initiative of WaterShed Partners has 1407 Facebook likes.
- **East Metro Water Blog:** The blog ([www.eastmetrowater.areavoices.com](http://www.eastmetrowater.areavoices.com)) had 6,051 visits in 2014.
- **Advertising:** EMWREP purchased Facebook advertising for the first time in 2014 to promote several spring workshops. Analytics showed that these ads were a cost effective method to reach a new audience and resulted in more people registering for the workshops. Below is a summary of the number of people reached by each ad and the number of people who “clicked” through to a website to get registration information:
  - Lake Elmo horse workshop: 2946 reached, 56 clicks
  - Scandia aquatic invasive workshop: 1983 reached, 18 clicks
  - Forest Lake shoreline workshop: 1962 reached, 33 clicks
  - Stillwater raingarden workshop: 1315 reached, 66 clicks
  - Woodbury raingarden workshop: 3947 reached, 78 clicks
  - Oakdale raingarden workshop: 2851 reached, 126 clicks

TOTAL: 15,004 people reached by ads; 377 clicked to get registration info



Above: An example of one of the Facebook advertisements.

**WaterShed Partners:** EMWREP is one of 65 partners in the WaterShed Partners, an innovative, dynamic coalition of public, private and non-profit organizations in the Twin Cities metro area that work collaboratively to teach residents how to care for area waters. WaterShed Partners coordinates the Clean Water Minnesota Media Campaign, maintains the [www.cleanwatermn.org](http://www.cleanwatermn.org) website, the MS4 Toolkit, and the StormDrain Goalie program, and has prominent exhibit space in the Eco Experience and DNR Buildings at the Minnesota State Fair. EMWREP educator Angie Hong is a member of the WSP steering committee.



Above: Dave Wall, MPCA, talks about nutrients in the Mississippi.

In addition to holding monthly meetings for metro area water educators, WSP coordinated the following special events and professional trainings in 2014:

- *More than a Message*, professional training with Eric Eckl: February, 12
- Mississippi River on-the-water boat workshop: June, 11
- *Sustainability, Behavior Change, and Making the Invisible Visible*, roundtable discussion: November, 12

EMWREP education assistant Jenn Radtke presented at the October WSP meeting about working with faith-based communities, and Angie Hong was one of the panelists at the November roundtable discussion. The 2014 WaterShed Partners and Media Campaign annual report is included along with this report.

### Special Projects

- Outreach to Homeowners Associations and Lawn Care Companies: In 2014, the Washington Conservation District was awarded a \$50,000 “Green Communities” Clean Water Fund Grant from the Minnesota Board of Water and Soil Resources (BWSR) to build off of previous outreach to HOAs and lawn care companies in the east metro. During the fall, EMWREP staff conducted focus group sessions with HOA board members, property managers, and landscape companies to identify opportunities for, and barriers to, adopting clean water practices, lower-impact lawn care and stormwater BMPs at local HOAs. Groups ranged in size from 5 to 12 participants. The three focus groups that were conducted included:
  - HOA Board Members – September 30<sup>th</sup>
  - Property Managers – October 2<sup>nd</sup>
  - Landscape Companies – October 7<sup>th</sup>

Focus group participants provided the following feedback at these sessions:

- The best way to reach new HOAs is through property management companies and landscape companies working with HOAs. For these two groups, phone calls are the best form of communication.
- To work successfully with an HOA, you must first build relationships, and this can take time. For the purposes of grant projects, it is usually easiest to work with HOAs that are already organized and have expressed an interest in working with their city, watershed or the WCD.
- Most HOA residents have very high expectations for the appearance of turf areas in their neighborhoods and low tolerance for weeds in native areas. Most also expect

water quality improvement projects such as raingardens and pond buffers to be manicured and attractive.

- Maintenance expenses and the availability of maintenance assistance are major concerns for any type of HOA project.
- HOA boards and property managers are unlikely to install stormwater BMPs or retrofit their irrigation systems without financial incentives. They are also more likely to be motivated by long-term cost savings (such as reducing irrigation fees), or fixing a problem (such as flooding) than by improving water quality or beautifying their landscaping.

Moving into 2015, EMWREP staff will be reaching out to up to six HOAs in Washington County to complete clean water grant projects and will also prepare a guidebook with lessons learned and recommended practices for conducting outreach with HOAs.

- **Green Congregations:** In 2014, EMWREP initiated new strategies for increasing the educational value of clean water projects and staying connected with faith-based communities that have installed projects in the past. Responding to feedback from a focus group conducted in 2013, EMWREP created a monthly e-newsletter, which is sent to 30 church leaders. The newsletter contains tips for project maintenance and stormwater pollution prevention, as well as info for congregations to include in their bulletins and newsletters. A new webpage - [www.mnwcd.org/green-congregations](http://www.mnwcd.org/green-congregations) - was also created to help connect congregations with info and resources. A summer tour of six churches with clean water projects was poorly attended, however, a number of the churches have scheduled site visits with the Washington Conservation District to get advice on project maintenance.

- **Clean Water Geocaching Trail:** In June of 2014, EMWREP debuted a new geocaching trail as a unique way to connect with new audiences and young families. Geocaching is a popular recreational activity in which people hunt for hidden caches using GPS coordinates instead of maps. The EMWREP trail includes nine caches hidden in locations where EMWREP partners have completed clean water projects, including:

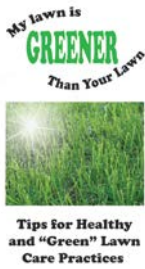
1. Bone Lake Fish Barrier (CLFLWD)
2. Square Lake Clean Water Project (CMSCWD, WCD, Washington County Parks)
3. Hugo City Hall (RCWD)
4. Lake Phalen Shoreline Restoration (RWMWD)
5. Sunfish Lake Park (Lake Elmo and VBWD)
6. Oak Glen Golf Course (BCWD)
7. Lily Lake Boat Launch (Stillwater, WCD, and MSCWMO)
8. Wilmes Ravine Restoration (SWWD and Woodbury)
9. Washington Conservation Center (WCD and RWMWD)

- **Aquatic Invasive Species Workshop:** Fifty-five people attended an AIS workshop held in Scandia on March 15. At the workshop Comfort Lake – Forest Lake and Carnelian–Marine–St. Croix Watershed Districts provided updates on lake aquatic invasive species inventories and DNR watercraft inspections, Angie Hong shared a success story from a Lake Minnetonka boat launch retrofit, and participants practiced identifying common native and invasive aquatic species.



Above: EMWREP summer intern Hannah Keller places a geocache near Brown's Creek.





Above: Front side of door hangers.

- Door hangers: During the summer of 2014, EMWREP designed and distributed approximately 750 door-hangers in neighborhoods around Colby Lake, Woodbury reminding people to sweep up their grass clippings and advising them of other water-friendly lawn care practices. South Washington Watershed District, Woodbury and Washington Conservation District recently installed 25 right-of-way raingardens in the neighborhood to reduce runoff pollution to Colby Lake, and staff had observed that grass clippings in the street were washing into the new raingardens.
- Teacher education: In August, EMWREP staff took 20 local teachers on a tour of conservation and water quality improvement projects in the Stillwater area as part of a training organized by the St. Croix River Association and Earth Partnership for Schools. The group visited Lily Lake and raingardens in the surrounding neighborhoods, the ravine and stream flowing out of Lake McKusick, the Trinity Lutheran Church parking lot, the Olson prairie near Silver Creek and Goldstrand grassed waterway in Stillwater Twp.



Above: Teachers walk through a prairie in Carnelian-Marine-St. Croix Watershed.

**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.

Facebook advertising purchased by EMWREP in 2014 proved to be a successful and inexpensive way to reach new audiences and increase workshop participation. Knowledge gained during HOA focus groups will help us to develop appropriate educational tools and resources for this audience in the future. EMWREP will also continue to actively support WaterShed Partners as that group develops a strategic plan for reaching a variety of audiences in the Twin Cities metro area in 2015.

**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:** EMWREP has been a key member of the Blue Thumb – Planting for Clean Water partnership since the program was developed by Rice Creek Watershed District in 2006. During 2014, the Blue Thumb partnership included more than 70 public and private entities - nurseries, landscaping companies, watershed agencies, cities, non-profits and citizen groups. EMWREP has used Blue Thumb tools and resources, such as the website and print materials, to conduct public education and enhance outreach efforts. Angie Hong also served on the Blue Thumb steering committee between 2007 and 2014.

Moving forward into 2015, Blue Thumb will undergo a major transformation, and the non-profit organization formerly known as Metro Blooms will now be operated as a new non-profit called Blue Thumb. This new organization will continue to provide public education about native plants, raingardens and shoreline plantings; however, the change in structure will likely mean that Blue Thumb will no longer be a central component of the EMWREP work plan in future years. EMWREP will continue to promote watershed cost-share programs, conduct targeted outreach for neighborhood raingarden projects, and conduct educational workshops for homeowners using already developed materials.

**Workshops:** EMWREP holds community workshops to promote native gardens, raingardens and shoreline plantings. These workshops are open to interested community members and are promoted through flyers, press releases and community newsletters. In 2014, EMWREP conducted raingarden design workshops in four communities and held one shoreline workshop and two raingarden maintenance workshops:

- Raingarden design workshops
  - Oakdale - March 4 (21 participants)
    - Participants from Middle St. Croix, Ramsey-Washington Metro, Rice Creek, South Washington, and Valley Branch Watersheds
  - Woodbury - March 11 (32 participants)
    - Participants from Ramsey-Washington Metro, Rice Creek, South Washington, and Valley Branch Watersheds
  - Stillwater - April 7 (30 participants)
    - Participants from Brown's Creek, Carnelian-Marine-St. Croix, Valley Branch and Middle St. Croix Watersheds
  - Bayport - April 24, 29 and May 1 (28 participants)
    - Participants from Carnelian-Marine-St. Croix, Comfort Lake – Forest Lake, Valley Branch and Middle St. Croix Watersheds
- Shoreline planting workshop, Forest Lake – May 6 (28 participants)
  - Participants from Brown's Creek, Carnelian-Marine-St. Croix, and Comfort Lake – Forest Lake Watersheds
- Raingarden maintenance workshops
  - Lake Elmo, Lake Demontreville – for the Girl Scout Troop who “adopted” the raingarden
  - Lake Elmo, Tablyn Park – for local residents

**Neighborhood Parties:** EMWREP helped to coordinate five neighborhood gatherings in 2014:

- Bayport, May 3: Blue Thumb party at Julie Grecian's home
  - Approximately 10 people in the Inspiration neighborhood attended.
- Lake Elmo, Aug. 7: Evening in the Big Backyard
  - Co-hosted by two families who built raingardens with assistance from the Valley Branch WD and Washington CD in previous years. At least 50 people came to visit both homes to learn more about raingardens and landscaping for large lots.
- Forest Lake, Aug. 14: Evening Along the Shore
  - Hosted by the Haider's, who installed a shoreline planting in 2010 with assistance from the Comfort Lake – Forest Lake Watershed District and Washington Conservation District. Approximately 25 people came.
- Stillwater, Sept. 4: Lily Lake Picnic at Peterson's home
  - Lily Lake Association, Mike Isensee (Middle St. Croix WMO) and Angie Hong talked about raingardens, shoreline plantings and other things local residents can do to improve lake water quality. Approximately 30 people attended.
- Wyoming, Sept. 6: Comfort Lake Picnic
  - Hosted by the Spence's and co-sponsored by EMWREP, the Comfort Lake – Forest Lake Watershed and the Comfort Lake Association. Approximately 20 people attended.



Above: Neighbors gather at Lily Lake in Stillwater.

**Presentations:** In addition to workshops, EMWREP presented to the Pine Ridge Garden Club in Cottage Grove on January 15.

**Targeted homeowner outreach:** During 2014, EMWREP provided outreach and educational support for the following neighborhood stormwater retrofit projects:

- Croixwood – Stillwater (Brown's Creek Watershed District)
- Lily Lake – Stillwater (Middle St. Croix Watershed Management Organization)
- Casey Lake – North St. Paul/Maplewood (Ramsey-Washington Metro WD)

**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 2014:

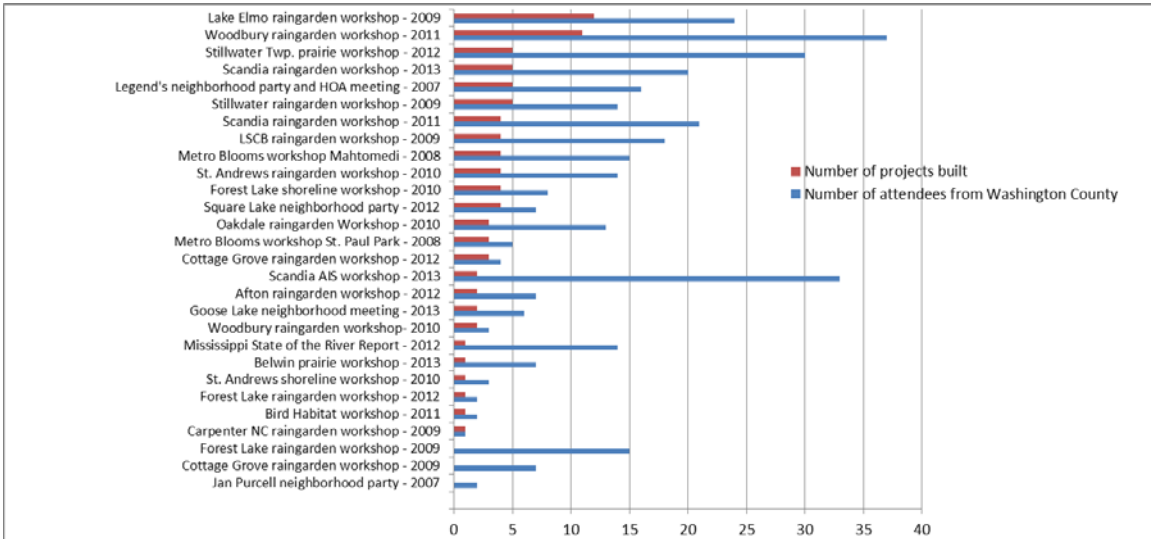
- 233 site visits
- 33 new projects installed; 34 projects from previous years completed
- 68.75 pounds of phosphorus (P) captured by all projects installed in 2014
- 58,122 pounds of total suspended solids (TSS) captured by all projects in 2014

**Promotional materials:** EMWREP has created a suite of print materials and brochures to promote Blue Thumb practices. We also have interactive displays, digital photo frames, posters and banners that we use ourselves and loan out to other for use at community education events.

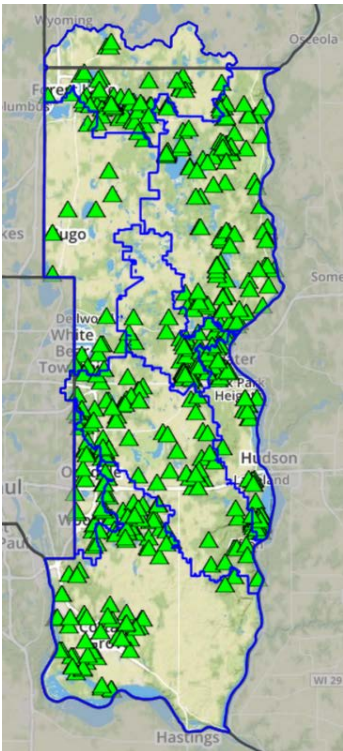
- In 2014, EMWREP coordinated with University of Connecticut on an effort to expand their newly created raingarden app to other states, including Minnesota. For the project, staff compiled a list of 450 raingarden plants for Minnesota and provided the app designers with information about raingarden design standards in Minnesota. The app should be available for mobile devices in Minnesota in 2015.

**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. One of the biggest developments for 2014 was the debut of a new web based project database for all of Washington County, developed by the Washington Conservation District in partnership with the county and several watershed management organizations. This new database makes it much easier to track whether people attending workshops eventually complete clean-water projects, as well as to visually demonstrate the reach of EMWREP educational activities over the years. Information in the database indicates that:

- Out of 961 voluntary urban BMPs built in Washington County between 2007 and 2013, 115 came from people who attended EMWREP workshops – **12%**.
- Of 362 workshop attendees (2007-2013), 106 installed BMP projects – **29%**.



The table above shows the number of people who attended EMWREP workshops, 2007-13, as well as the number of attendees from each who built clean water projects (does not include workshop attendees from Ramsey or Chisago Counties or people who did not provide complete contact information).



The image on the left shows where people live who attended EMWREP workshops, 2007-2013. A publicly accessible version of the map and database can be found at <http://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 erodable 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.

**Horse owner's workshop:** EMWREP collaborated with Hagberg's Country Feed, LLC to put on a three-hour workshop for people who own and board horses in Washington County. 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.

Workshop topics included:

- Equine dentistry and nutrition
- Preventing polluted runoff
- Basic first aid for horses

**Cover Crop Workshop:** On June 12, Washington Conservation District and Carnelian-Marine-St. Croix Watershed District worked with local farmer Pam Arnold to host a cover crop workshop in Scandia. Area landowners came to learn how cover crops can improve soil health as well as prevent runoff pollution during the winter and early spring.



Above: Pam Arnold (host), Jim Shaver (CMSCWD), and area landowners learn about cover crops.

**Nitrates Water Testing:** In September, Washington Conservation District and Washington County began reaching out to landowners with private wells in Cottage Grove and Denmark Twp. as part of an initiative to test wells in southern Washington County for nitrates contamination. The project included outreach, water testing, and follow-up site visits with landowners (to be conducted in 2015) to identify possible sources of contamination.

**Support for targeted implementation projects:** During 2014, EMWREP provided outreach assistance for several 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

**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 yard care, shoreline plantings, native plantings, well water and invasive species management.

**Evaluation:** During 2014, 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.



**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](http://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 meet one-on-one to discuss conservation projects.

**Targeted outreach:** EMWREP did not do any targeted outreach to businesses in 2014.

**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 2014.

## 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 2014, 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:

- *Innovation in BMPs* – April 1, Maplewood (43 participants)
  - Co-sponsored by MN Extension, U of MN Stormwater Mgmt. Certification, Capitol Region and Ramsey-Washington Metro WDs and Washington CD
  - Presenters talked about innovative applications of stormwater BMPs, as well as new and experimental materials, installation techniques and maintenance strategies from local implementers.
  - Staff from the following EMWREP area entities attended:
    - Carnelian-Marine-St. Croix Watershed District
    - Forest Lake
    - Ramsey County Parks and Recreation
    - Roseville
    - St. Paul Park
    - Woodbury
- *Erosion and Sediment Control – Reg. Enforcement* – May 14, Cottage Grove (23 participants)
  - Led by U of MN Stormwater Management Certification Program
  - A one-day course on inspecting construction sites for NPDES compliance as part of MS4 permits – party taught outside in the field.
- *P8 Modeling Workshop* – Sept. 28, Oakdale (28 participants)
  - Developed by a partnership between University of Minnesota Erosion and Stormwater Management Certification Program and Extension Water Resources Team in collaboration with Barr Engineering Company
  - Participants learned about P8, a model for predicting the generation and transport of stormwater runoff pollutants in urban watersheds
  - Staff from the following EMWREP area entities attended:
    - Comfort Lake – Forest Lake Watershed District
    - Cottage Grove
    - Focus Engineering (Lake Elmo)
    - Rice Creek Watershed District
    - South Washington Watershed District
    - Stillwater
    - Woodbury

**Presentations:** During 2014, EMWREP also began developing a series of short 10-min PowerPoint presentations for partners to use during monthly staff meetings. The presentations cover training topics listed in the MS4 permit, including:

- 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.

Currently, the new presentations are available in draft format for EMWREP partners, as well as Minnesota Pollution Control Agency staff and Minnesota Cities Stormwater Coalition members to review. Cottage Grove and Forest Lake used two of the presentations for staff training in 2014.

For two other training topics listed in the MS4 permit, EMWREP will continue to use previously created materials and host trainings for city staff in conjunction with Fortin Consulting.

- Landscaping, park, and lawn maintenance (Will use video created for MS4 Toolkit and continue to host Summer Turf Maintenance workshops with Fortin Consulting.)
- Cold-weather operations, including plowing or other snow removal practices, sand use, and application of deicing compounds (Will use training materials created by MPCA and Mississippi Watershed Management Organization and continue to host Winter Snow and Ice Maintenance trainings with Fortin Consulting.)

**Metro Chloride Management Plan:** EMWREP staff participated in development of the MPCA led Metro Chloride Management Plan and education and outreach components of the plan.

**Evaluation:** Workshop evaluations collected at the April 1 Stormwater U workshop indicated that participants learned about stormwater best management practices and acquired information they will use in their jobs. Participants said they were interested in learning about the following topics at future trainings:

- Stormwater BMP inspections, maintenance & monitoring techniques
- BMPs to use in problem soils (clay soils, compacted soils, karst regions, high water, table, contaminated soils)

**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:**

**Regional workshops:** On July 29, EMWREP worked with several other partners, including the Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, University of Minnesota Extension, the St. Croix River Association and partners in Wisconsin to hold a workshop on the St. Croix River for local decision makers from Minnesota and Wisconsin. The workshop was the fifth “on-the-water” workshop we have held and was attended by 119 people, including representatives from:

- Afton, Bayport, Cottage Grove, Denmark Twp., Forest Lake, Hastings, Lakeland, Lake St. Croix Beach, Marine on St. Croix, Scandia, Stillwater, St. Mary’s Point, Woodbury;



Above: Jenn Radtke leads St. Croix River “on-the-water” workshop participants in a small group discussion.

- Brown’s Creek, Comfort Lake – Forest Lake, Carnelian-Marine-St. Croix, Middle St. Croix, South Washignton, and Valley Branch Watersheds; and Washington Conservation District; and
- Washington County Board of Commissioners and Washington County Board of Adjustment and Appeals.

The program objectives were to:

- Increase knowledge of the multiple benefits of a healthy St. Croix River and inland lakes and streams, including the economic, recreational, ecological, and quality of life values;
- Acquire new knowledge about actions community leaders can take to protect and improve water resources and how to make those happen in their communities;
- Share and learn from leaders in other communities who are facing challenges and changes in urban, developing, rural, and agricultural communities and how they are addressing issues and opportunities;
- Work in small community teams to identify key take-away messages and learn how to effectively communicate those with decision makers and others in the community; and
- Build relationships with neighboring communities to develop a strong coalition that will work to protect St Croix River health.



Above: The Washington County Water Consortium visits a clean water project in Denmark Twp.

**Community Workshops and Presentations:** On April 21, Angie Hong spoke to the Oakdale EMC about raingardens, their role in stormwater management, and other stormwater management efforts underway at the local and state level.

**St. Croix Basin Minimal Impact Design Standards (MIDS) grant project:** EMWREP continued to provide support for the MIDS St. Croix Community Assistance project in 2014. On Dec. 16, a workshop was held for attorneys from local communities considering MIDS. Five attorneys attended, representing all of the target communities in Washington County except for Afton.

**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 showed that participants highly valued the program and being on the river itself greatly enhanced their learning experience. Participants indicated that they learned the most about actions urban and developing communities can take to protect water resources, including learning more about MIDS, stormwater best management practices (BMPs), and low impact development (LID). They also said they would share this information with others in their communities and would take action as a result.

## 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 Metro WaterShed Partners MS4 work group is currently discussing strategies for updating the MS4 Toolkit and website. EMWREP has participated in these conversations and will provide assistance as needed to move this process forward.

**Evaluation:** Though EMWREP used surveys with city staff during the creation of the MS4 Toolkit, we do not currently have measures in place to evaluate the use or impact of education materials available through the toolkit. Website analytics tell us that more than 200 people have created profiles to access materials in the toolkit.



**APPENDIX A: EDUCATION PROGRAM BUDGET FOR 2013-2015**

**Shared Water Resource Education Program - Washington Conservation District  
Annual Budget**

<b>Staff Support (2650 hours/year)</b>	<b>Materials</b>	<b>Total</b>
\$119,780	\$6,000	<b>\$125,780</b>

**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.

<b>PARTNER</b>	<b>Annual Contribution</b>
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
Willernie	\$560
West Lakeland Twp	\$560
	<b>\$125,780.00</b>

\*The table above shows funding contributions for EMWREP members during 2014.