

# 2010 Annual Report

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. Members of the EMWREP partnership in 2010 included 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, and Willernie, West Lakeland Township, Washington County and the Washington Conservation District. The EMWREP region covers all of Washington County as well as the portions of Valley Branch and Comfort Lake - Forest Lake Watershed Districts that stretch into Anoka, Chisago and Ramsey Counties. A map and list of EMWREP partners can be found at <a href="https://www.mnwcd.org/cleanwater">www.mnwcd.org/cleanwater</a>.

**Purpose:** The purpose of EMWREP is to educate the public and various other target audiences within the region about the impacts of non-point source pollution on local lakes, rivers, streams, wetlands and groundwater resources and engage people in projects that will help to protect and improve water quality in the region. EMWREP activities also help partners to meet education and public involvement requirements for MS4 Stormwater Pollution Prevention Permits and TMDL Plans.

**Partnership Structure:** EMWREP is guided by a steering committee comprised of representatives from each of the 17 partner organizations. The committee generally meets twice a year to provide recommendations on the program budget and activities. The EMWREP educator 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 educator prepares an annual report on program activities and provides outreach data and statistics for partners' MS4 Permit reports. All EMWREP reports, plans, print materials and news articles are available on-line at <a href="https://www.mnwcd.org/emwrep">www.mnwcd.org/emwrep</a>.

#### **Summary of 2010 EMWREP Education Programs:**

<u>Public Education Campaign</u>: EMWREP engages in a number of activities aimed at increasing awareness of water resource issues, promoting a conservation ethic among local residents, and catalyzing behavior change. Many of these activities are accomplished in partnership with existing government, non-profit, and community based groups, as well through local media outlets. The general education campaign is also used to promote targeted outreach efforts and partner BMP programs.

Since 2006, EMWREP has produced weekly articles for several of the local newspapers, as well as providing material for 32 cities within the region to include in their newsletters. Articles are also featured on the blog <a href="http://eastmetrowater.areavoices.com">http://eastmetrowater.areavoices.com</a> and on the Washington Conservation District and Blue Thumb Facebook pages. EMWREP reached 7790 people at local community events in 2010, including the Washington County Fair.

Blue Thumb Program: (www.BlueThumb.org) The Blue Thumb – Planting for Clean Water program was developed by the Rice Creek Watershed District in 2006 and by 2010 was a dynamic coalition of more than 60 partner organizations working together to raise awareness about stormwater pollution and encourage homeowners to plant native gardens, raingardens and shoreline projects to protect surface and groundwater resources.

EMWREP uses Blue Thumb to promote partner BMP programs. This outreach is a critical component of an adaptive ecosystem management approach that connects outreach with project implementation and water monitoring. EMWREP uses workshops, neighborhoods parties and community presentations to connect local residents with resources available through Blue Thumb and the EMWREP partnership. Outreach in 2010 resulted in 130 new water quality projects in Washington County.

Blue Birds / Go Wild! (www.mnwcd.org/gowild) This is a new outreach strategy to leverage public interest in birds and wildlife in order to engage rural property owners in planting and habitat improvement projects in targeted areas where there will also reduce erosion and non-point source water pollution. Activities in 2010 included two bird habitat workshops, as well as surveys, focus groups and interviews to help develop new outreach strategies.

A key component of this program in 2011 will be collaborative outreach with local non-profits and sportsmen groups. EMWREP's role will be to support the outreach conducted by these groups, to help connect landowners with additional resources available through EMWREP partners, and to encourage projects that protect water as well as improving wildlife habitat.

Blue Biz: (www.cleanwaterMN.org/businesses) The Blue Biz program consists of a website and outreach materials that partners can use to engage commercial property owners in BMP projects. During 2010, EMWREP reached out to specific property owners identified in the Cottage Grove Hwy 61 sub-watershed assessment, resulting in two new bioretention projects.

Stormwater U: (www.extension.umn.edu/stormwater/) Stormwater U is a technical training series for municipal staff and contractors, including engineers, planners, inspectors and public works. Stormwater U workshops are hosted in collaboration with University of Minnesota Extension and the Minnesota Erosion Control Certification Program. In 2010, EMWREP hosted workshops on shoreline restoration, turf management and snow and ice management.

NEMO: (www.northlandnemo.org) 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 one of ten to twenty partner organizations. During 2010, EMWREP facilitated the Watershed Game activity with several groups of community leaders and helped to coordinate a workshop on the St. Croix River attended by 100 officials from communities in Minnesota and Wisconsin.

MS4 Toolkit: (www.cleanwatermn.org/MS4toolkit) EMWREP developed the MS4 Toolkit 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 website is now managed by the WaterShed Partners media campaign.

<sup>\*</sup> A map of EMWREP program activities is included at the end of this report.

## MS4 Permit requirements for the Stormwater Pollution Prevention Program

Correlating the Minimum Control Measures with EMWREP Programs and Audiences

#### 1. Public Education and Outreach

- 1. Public Education Campaign (general public)
- 2. Blue Thumb (homeowners)
- 3. Blue Bird / Go Wild! (rural landowners)
- 4. Blue Biz (commercial property owners)

#### 2. Public Participation

- 1. Public Education Campaign
- 2. Blue Thumb
- 3. Blue Bird / Go Wild!
- 4. Blue Biz

## 3. Illicit Discharge Detection and Elimination

- 1. Public Education Campaign
- 2. MS4 Toolkit (multiple audiences)

#### 4. Construction Site Storm Water Runoff Control

- 1. Stormwater U (municipal staff and contractors)
- 2. MS4 Toolkit

## 5. Post Construction Storm Water Management

- 1. Stormwater U
- 2. NEMO (local elected officials and decision makers)
- 3. Blue Biz
- 4. MS4 Toolkit

#### 6. Pollution Prevention and Good Housekeeping in Municipal Operations

- 1. Stormwater U
- 2. MS4 Toolkit

## 2010 Program Activities and Highlights

**Public Education:** General public education and outreach activities in 2010 included community events, student programs, mailings, newspaper columns, press releases, city newsletter articles, websites and social media. EMWREP also took part in the WaterShed Partners Clean Water Minnesota media campaign.

<u>Community events:</u> EMWREP reached 7790 people at local community events including:

- Woodbury Sustainability Fair (50)
- Hugo Feed Mill Open House (50)
- Forest Lake Home Show (200)
- Cottage Grove Arbor Day Event (100)
- Marine Millstream Day (300)
- Lake St. Croix Beach Heritage Day (300)
- Family Means St. Croix Valley Garden Tour (850)
- Square Lake Triathlon (900)
- Washington County Fair (5000)
- Newport Community Buckthorn Pull (40)



The Family Means St. Croix Valley Garden Tour featured a home in Mahtomedi with porous pavement and a raingarden.

<u>Student Programs:</u> EMWREP participated in two water education programs during 2010 for 3-5<sup>th</sup> grade students:

- OH Anderson Field Day, Mahtomedi May (7 3<sup>rd</sup>-5<sup>th</sup> grade classes)
- Children's Water Festival, St. Paul September (7 5<sup>th</sup> grade classes)

<u>Targeted Mailings:</u> Postcards were sent to 2490 residences during the year to advertise workshops and opportunities, including:



Postcards promoting native plants, raingardens and shoreline plantings were sent to shoreline property owners in Comfort Lake – Forest Lake Watershed District.

- 1034 shoreline property owners in Comfort Lake
  Forest Lake Watershed
- 971 rural landowners with more than 5 acres in Washington County
- 71 woodland property owners within the St. Croix River bird habitat project area
- 244 landowners in Carnelian-Marine-St. Croix Watershed
- 80 homeowners with the Power's Lake Trees project area in Woodbury
- 90 rural landowners in priority outreach areas within Washington County

Newspaper articles: The EMWREP educator writes weekly articles (52 per year) for several local papers. These articles can be found on-line at the East Metro Water blog <a href="http://eastmetrowater.areavoices.com">http://eastmetrowater.areavoices.com</a>. In addition, the articles were printed in the following papers:



- Valley Life 49,000 readers in Stillwater, Bayport, Oak Park Heights, Stillwater Township, Afton, Lakeland, Marine, Hugo, Lake Elmo, Houlton, Somerset and New Richmond.
- Lillie Reviews –34,392 readers in Oakdale, Lake Elmo, North St. Paul, Maplewood, White Bear Lake, White Bear Township, Gem Lake, Western Mahtomedi, and Landfall. (Articles are occasionally printed in Lillie owned papers outside the EMWREP area as well, reaching another 83,608 readers.)
- South Washington County Bulletin 8616 readers in Cottage Grove, St. Paul Park, Newport and Grey Cloud.
- Oakdale and Woodbury Patch on-line newspapers with more than 535 followers on twitter and facebook.

<u>Press releases:</u> Several other papers print press releases and news articles from EMWREP one to five times per year, including:

- Hugo Citizen 10,000 readers
- Forest Lake Times 13,029 readers
- Scandia Messenger 1075 readers
- Woodbury Bulletin 7811 readers
- Pioneer Press 185,736 weekday readers

<u>City newsletter articles:</u> Information about water resources and EMWREP partner activities reached 355,174 people through community newsletters in 2010:

- Afton (pop. 2800)
  - o <u>Jan.</u> WCD tree and rain barrel sale; Benefits of trees
  - o Feb. Bird habitat & clean water
  - o July St. Croix River Awareness week & St. Croix Garden Tour
- Baytown (pop. 1970 "Baytown Neighbors" goes to 88 households)
  - o Feb. Rain barrel sale
  - o May Bird habitat & clean water
- Birchwood (pop. 916)
  - o Summer Blue Thumb workshop insert
- Cottage Grove (pop. 34,000)
  - o May Car washing and chlorinated water discharges
  - o June Yard waste and lawn watering
- Dellwood (pop. 1035)
  - o Summer mayor's letter bird habitat

- Lake Elmo (pop. 7647)
  - o April Conserving water and lawn watering
  - o <u>Aug.</u> Illicit discharge, water conservation and erosion control
- Lakeland (pop. 1830)
  - o January Bird habitat and clean water
- Mahtomedi (pop. 8000)
  - o Jan. March Winter salt and de-icing
  - o April June WCD tree and rain barrel sale
  - o Oct. Dec. New policies for city winter snow and ice management
- Newport (pop. 3715)
  - o Spring Stormwater Pollution
  - o Fall Buckthorn Day
- Oak Parks Heights (pop. 4724)
  - o <u>Second quarter</u> Rain barrel sale
- Stillwater (pop. 18,000)
  - o April Clean Water, lawn care, Blue Thumb
- West Lakeland (pop. 3547)
  - o Spring insert Blue Thumb workshop
- Woodbury (pop. 57,345)
  - Feb WCD tree and rain barrel sale
  - o Nov. stormwater update Shallow lakes

<u>Websites and Social Media</u>: 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:

- The Washington Conservation District website (<u>www.mnwcd.org</u>) received 11,192 visits from 4,375 visitors in 2010. EMWREP programs and partners are featured on several pages within the website, including <u>www.mnwcd.org/cleanwater</u>, <u>www.mnwcd.org/emwrep</u>, <u>www.mnwcd.org/gowild</u> and <u>www.mnwcd.org/water blue thumb</u>. WCD has around 50 friends on facebook.
- The Blue Thumb website (<u>www.BlueThumb.org</u>) received 24,324 visits from 17,286 visitors in 2010. Blue Thumb has around 340 friends on facebook.
- The Clean Water Minnesota website (<u>www.cleanwatermn.org</u>) received 2087 visits from 1633 visitors in 2010.
- The East Metro Water Blog was created in late October of 2010. It received an average of 68 visits per week in December.

<u>Clean Water Minnesota Media Campaign</u>: The WaterShed Partners are an innovative, dynamic coalition of over 50 public, private and non-profit organizations in the Twin Cities metro area that work collaboratively to teach residents how to care for area waters. The purpose of the WaterShed Partners is to promote a public understanding that inspires people to act to protect water quality in



The "rubber ducky" ads played on Channel 45 and cable television stations.

their watershed. EMWREP has been part of the WaterShed Partners since 2006.

WaterShed Partners coordinate the Clean Water Minnesota Media Campaign, which educates the public about stormwater pollution prevention through mass media such as television and radio. The group also maintains the www.cleanwatermn.org website, which provides resources for stormwater educators through the MS4 Toolkit (developed by EMWREP in 2009) and also has seasonal clean water tips for the public.

During 2010, the media campaign included billboards, commercials on cable television, Channel 45, and St. Paul Saints Television, and public service announcements on Minnesota Twins Radio and Minnesota Public Radio. Combined, these activities yielded an estimated 15,000,000 media impressions.



**Blue Thumb**: Blue Thumb – Planting for Clean Water activities in 2010 included workshops, meetings, presentations and community events. Last year, EMWREP also developed several new educational resources, including flyers and brochures, interactive displays and interpretive signs for local demonstration projects. Outreach in 2010 resulted in 130 new water quality

projects in Washington County. Additionally, the Blue Thumb partnership maintains the <a href="https://www.BlueThumb.org">www.BlueThumb.org</a> website and reaches the public at several metro and statewide events each year.

<u>Workshops</u>, meetings and presentations: In 2010, 130 people attended Blue Thumb workshops, meetings and presentations organized by EMWREP partners.

- Blue Thumb
  - o Oakdale March 16 (16)
  - o Woodbury April 27 (20)
  - o Birchwood November 18 (8)
- Raingardens
  - o St. Andrews, Mahtomedi, March 23 (13)
- Shoreline plantings
  - o St. Andrews, Mahtomedi, April 6 (10)
  - o Forest Lake, April 13 (15)
- Forest Lake Rotary, March 24 (15)
- Lake Elmo neighborhood party, June (8)
- CMSCWD lake meetings (40)
  - o Long Lake, August
  - o Sand Lake, August
  - o Square Lake, August



LSCB volunteer raingarden planting



Newport neighborhood projects

<u>Community Events:</u> In addition to the local community events listed under Public Education, Blue Thumb partners also provided education and resources at several high visibility regional events, including:

- National Geographic, Blue Planet 2010 Expedition, July 4 in Minneapolis
- Minnesota State Fair, Eco Experience (attended by 350,000)









National Geographic made Minnesota the first stop on its Blue Planet 2010 Expedition, and partnered with Blue Thumb on a July 4 community event.

Exhibits and Interpretive Signs: EMWREP has several Blue Thumb posters, banners and table top displays for use at community events. A new interactive display developed in 2010 allows people to actually see the lengths of native plant roots and is very popular with kids as well as adults. This past year, interpretive signs were also created for demonstration projects at:

- Square Lake Park in May Township
- Lake St. Croix Beach City Hall
- Valley Ridge Mall in Stillwater

<u>Educational materials:</u> EMWREP developed several new fact sheets and brochures for Blue Thumb outreach in 2010. Current materials offered include:

- Blue Thumb Year-Round Guide to Yard Care
- Native Flowers, Shrubs and Trees for Yards, Raingardens and Shorelines
- Raingardens The secret to clean water is in the roots!
- Raingardens Plan today, plant tomorrow!
- Shoreline Plantings Let nature do the work for you!



New signs at Square Lake Park.

The retractable roots display is a conversation piece at community events.



**Blue Birds** / **Go Wild!:** During the spring of 2010, EMWREP helped to host two workshops for landowners on the St. Croix River focusing on bird habitat and clean water. During summer and fall, EMWREP conducted surveys, focus groups and interviews with rural landowners in Washington County to help develop new outreach strategies for this audience. The goal for 2011 is to help more rural landowners install projects that reduce water pollution, especially on highly erodable lands that drain to rivers, lakes and streams within the area.

<u>Bird Workshops:</u> EMWREP collaborated with the WCD, Great River Greening and Audubon Minnesota to hold two workshops for large lot owners along the St. Croix River to promote projects, such as invasive species removal and native plantings, that would improve bird habitat and reduce runoff pollution. A total of 40 people attended.

- William O'Brien State Park April 29 (24)
- Afton State Park May 27 (16)



Postcard invitations were sent to people living in priority areas along the St. Croix River.

<u>County Fair Survey</u>: EMWREP surveyed 60 rural landowners at Washington County Fair in August. Findings indicated that:

- People are interested in:
  - o Controlling weeds and invasive plant species
  - o Reducing property taxes
  - Creating wildlife habitat
- They <u>are not</u> interested in planting buffers along streams and wetlands, fixing erosion or drainage issues or planting prairie.
- People with 5-10 acres are the most interested in conservation projects, while people with more than 40 acres and people with horses are the least.

<u>Focus Group Interviews:</u> During the fall, EMWREP worked with a student researcher from Macalaster University to conduct two focus group sessions with rural landowners in southern and northern Washington County.

- Afton People in this focus group cited privacy, wildlife and woods as their favorite aspects to living in southern Washington County. They were very interested in buckthorn management. The people who mentioned surface water concerns lived on a waterway or had active erosion problems on their land
- Northern County People in this group cited rural character and hunting and outdoor recreation as their favorite aspects to living in northern Washington County. They were most concerned with development pressure and perceived unfair treatment by cities, and thought outreach might be more successful if led by a non-profit or sportsman group instead of a government entity.





Survey and focus group participants expressed more interest in managing invasive plant species and creating wildlife habitat on their land than in doing projects to reduce water pollution.  People from both groups expressed more interest in creating wildlife habitat and managing invasive species on their properties than in doing projects to reduce water pollution.

<u>Interviews:</u> During the fall, EMWREP worked with student volunteers from the University of Minnesota to conduct interviews with rural landowners who had done conservation projects in the past and with organizations and groups working on conservation in the area.

- Landowner interviews:
  - Half of the people who had done conservation projects in the past had done so to correct problems, such as erosion, on their land, while the other half had done so to protect local water resources.
  - They indicated that the design assistance and people at the Conservation District were critical to helping them do their projects.
  - o Most were also interested in improving wildlife habitat.
- Organization interviews:
  - There are many groups doing education and activities around land and water conservation in the East Metro. Many expressed interest in working with EMWREP on outreach to local landowners.

<u>Next Steps:</u> EMWREP will continue to develop outreach strategies for rural landowners in 2011 and to work collaboratively with non-profit and sportsmen groups to encourage projects that protect water and improve wildlife habitat.

**Blue Biz:** During 2010 EMWREP developed new materials that partners can use for commercial outreach. In partnership with the South Washington Watershed District, Washington Conservation District and City of Cottage Grove, EMWREP attended a Cottage Grove Chamber event and reached out to specific businesses along Hwy 61 that were identified in a stormwater subwatershed assessment study. As a result, the South Washington County School District installed a bioretention area at their District Service Center and Target is working with the WCD and SWWD on a project plan. The following resources are available for commercial outreach:

- Website: www.cleanwatermn.org/businesses
- <u>Minnesota Businesses for Clean Water</u> one page fact sheet
- Stillwater Country Club case study fact sheet
- <u>Valley Ridge Mall</u> case study fact sheet
- Blue Businesses postcard



A website and print materials are available for outreach to businesses.

**Stormwater U:** During 2010, EMWREP collaborated with Blue Thumb partners to offer a shoreline restoration training for contractors and designers. EMWREP also collaborated with Ramsey-Washington Metro Watershed District, University of Minnesota Extension and Fortin Consulting to offer workshops on turf maintenance and snow and ice management for contractors and municipal staff.

<u>Shoreline Restoration:</u> This course, offered on February 9, was for landscape design and installation professionals that work on shoreline restoration projects. It covered topics such as design, plant selection and installation techniques.

• 75 participants attended from companies around the Twin Cities area

<u>Turf management</u>: This course, offered on April 20, was geared towards parks and ground maintenance staff and landscaping professionals. It covered topics such as mowing, watering, fertilizers and weed control and gave participants tools to reduce runoff pollution and save money.

 50 participants attended from cities and companies in Washington and Ramsey Counties



Contractors and municipal staff learned about turf management at a Stormwater U workshop in North St. Paul.

Snow and Ice Management: This course, offered on Oct. 26, was geared towards municipal road crews and private contractors that plow streets and parking areas. It provided instruction on reducing salt and chemical use while also maintaining safety.

 50 participants attended from cities and companies in Washington and Ramsey Counties

**NEMO:** In 2010, EMWREP used the newly developed Watershed Game activity to educate community leaders about practices that reduce runoff pollution. EMWREP also collaborated with the Minnesota DNR, Northland NEMO, St. Croix River Association, Middle St. Croix WMO, Washington Conservation District and the National Park Service to host a second workshop on the water for local elected officials and decision makers. EMWREP and partners also began work on the MIDS St. Croix project.

<u>Watershed Game:</u> EMWREP facilitated this activity with several groups, including:

- DNR Stakeholder workshop
- RWMWD Citizen Advisory Committee



Over 100 people attended the July workshop on the water.

Workshop on the St. Croix River: Over 100 local elected officials and decision makers from communities on both sides of the St. Croix River attended the workshop on the water, held July 21. The event included a keynote speech by Jim Almendinger, Senior Scientist with the St. Croix Watershed Research Station, followed by three interactive learning activities. Workshop facilitators conducted a guided view from the river, showcasing stories of success from rural, developing and fully developed communities along the river. They also shared water samples, aquatic invertebrates and monitoring technology. A final activity was designed to help communities select appropriate policies and practices to protect water quality and achieve other community goals.

MIDS NEMO Project: Conservation St. Croix, a collaborative of nine Minnesota Soil and Water Conservation Districts in the St. Croix Basin received a 319 Clean Water grant to help communities update policies, procedures, ordinances, and zoning and subdivision codes to better protect the river. During 2011, EMWREP and other partners on the project began laying out the project timeline and conducting an inventory of existing community policies, ordinances and codes.

**MS4 Toolkit:** In 2011, EMWREP continued to use materials from the MS4 Education Toolkit for education and outreach to a variety of audiences about non-point source water pollution.

