Background/Discussion

The purpose of this agenda item is to provide the Board with the 2017 East Metro Water Resource Education Program (EMWREP) Annual Report along with several other items detailing upcoming educational activities. Angie Hong will be available to attend the April 19th regular board meeting upon manager request to answer any questions.

MEMORANDUM

TO: CLFLWD Managers
FROM: Angie Hong, EMWREP
DATE: 2/7/18
RE: EMWREP Education Update for 2018

Included in this memo is a summary of education activities conducted by the East Metro Water Resource Education Program (EMWREP) in 2017, as well as an outline of activities planned for 2018.

Suggested action: Provide feedback on education priorities and activities in CLFLWD.

EMWREP 2017 Highlights

1. Educating and engaging the public
   a. **Public Education:** In 2017, EMWREP conducted 8 landscaping workshops; 4
      backyard tours; 9 family nature events; and participated in 10+ community events.
      i. **Highlights for CLFLWD:**
         1. Landscaping workshop in Forest Lake – May 2: 18 attendees
         2. AIS Identification workshop in Forest Lake – June 19: 18
            attendees
         3. Arts in the Park event – June 20
         4. Rain garden maintenance workshop at CLFLWD – Aug. 23: 33
            attendees
   b. **Engaging volunteers:** EMWREP received grant funding for the Master Water
      Stewards program and currently has 9 stewards in training. We’ll be recruiting 12
      new stewards in 2018. We also used county AIS funds to train 8 local residents at
      AIS Detectors.
      i. **Highlights for CLFLWD:**
         1. One steward in training through Master Water Stewards – Tom
            Furey, Bone Lake
         2. One AIS Detector – Sam Hathaway, Bone Lake. Three other
            residents in Forest Lake/Scandia also got certified & can provide
            support for area education and outreach.
         3. EMWREP also provided support for St. Croix Watershed Stewards
            efforts, by providing Jack MacKenzie with storm drain stenciling
            materials and flyers and helping to promote his lawn care
            workshops.
c. **Youth education:** Staff taught lessons about groundwater and watersheds to more than a dozen 4th and 5th grade classes; led activities at Cottage Grove and Woodbury Safety Camps; and provided support for the Woodbury Elementary raingarden project.

d. **Media and communications:** Through Watershed Partners, we created a new blog-style website (www.cleanwatermn.org) and a Neighborhood Clean-up engagement kit. I also continued to write weekly articles about water and conservation for the local newspapers (www.eastmetrowater.areavoices.com).

   i. **Highlights for CLFLWD:**

      1. 6 articles in Chisago Press
      2. 20 articles in Forest Lake Times

2. **Professional trainings for business and local government**

   a. Turfgrass management
   b. Illicit Discharge Detection and Elimination (IDDE)
   c. Bioretention design
   d. Winter maintenance workshop – 32 attendees
   e. Shoreline realtor workshops
      i. March 9 – 45 attendees
      ii. Nov. 16 – 40 attendees
   f. St. Croix River Workshop on the Water – 75 attendees

For education activities planned in 2018, please see attached outline.
2018 EMWREP Education Activities
*Denotes activities funded through special grants

1. Public education and engagement (1710 hours)
   a. PR and engagement for partner projects and activities (350 hours)
      i. Weekly newspaper articles & blog updates
      ii. Articles for city newsletters
      iii. Social media
      iv. Utilizing event calendars on partner and external websites
   b. Events (150 hours)
      i. Events in CLFLWD?
   c. Blue Thumb (400 hours)
      i. Maintenance workshops
         • Prairie: Feb. 13 - Scandia
      ii. Municipal water efficiency programs in partnership with county
      iii. Pilot Adopt-a-Raingarden program in Stillwater – export to other cities
      iv. Develop new handouts for site visits and events
      v. Continue exploring ways to work with builders and developers
   d. Lake Association education and outreach (80 hours)
      i. Spring workshop in Scandia (could support One Watershed, One Plan process)
      ii. E-newsletter – 157 recipients
   e. Watershed Partners (100 hours)
      i. Angie to continue serving on steering committee
      ii. Assistance in planning monthly meetings, annual river workshop, annual roundtable event, media campaign and neighborhood engagement kit
   f. Train and engage volunteers to provide support for community events (150 hours)*
      i. Continue to train 2017-18 Master Water Steward cohort & provide support for capstone projects. Recruit participants for 2018-19 cohort.
      ii. Develop a volunteer-activity network & provide volunteer training
   g. Lower St. Croix One Watershed, One Plan (100 hours)*
      i. Create a short survey to seek input from the public and other stakeholders in the Lower St. Croix – issue identification and prioritization.
      ii. Develop short presentation and accompanying questions to help partners gather feedback from community groups and organizations
      iii. Compile and summarize feedback gathered from public and stakeholders during other water planning processes (ie. watershed plan updates, 25x25, NPS strategic visioning)
      iv. Create templates for press releases, e-mail, and social media
   h. MS4 Toolkit*
      i. $50,000 from MPCA to update the kit!
   i. Groundwater education (90 hours)*
      i. Disseminate water reuse curriculum from Forest Lake with other High Schools
      ii. Teach 10-15 classes for 4th and 5th grade students – groundwater model and watershed game
   j. Aquatic invasive species (40 hours)*
2. **Outreach for project implementation (460 hours)**
   a. Provide support to partners for targeted outreach and large projects (360 hours)
      i. What support is needed in CLFLWD?
   b. Rural/ag outreach: Conduct audience research, identify connections, and develop new relationships to increase the number of agricultural landowners implementing BMPs, converting to perennials, and getting Ag Water Quality Certification. (50-100 hrs)
      i. Explore new partnerships with private partners such as General Mills and Cargill to support local farmers in transitioning to perennial crops or getting Ag Water Quality Certification.
         • Capitalize on Governor’s “Year of Water” and good PR for businesses that support local farmers?
      ii. Identify people and businesses that are part of the local supply chain: seed dealers, processors, crop advisors, purchasers, etc.
      iii. Build relationships with local farmers and people in the ag supply chain. Also include hobby farms/horses.
      iv. Provide outreach support for WCD farmer’s breakfast
      v. Potential to partner with 4H or FFA?

3. **Stormwater U / Professional Trainings (100 hours)**
   a. Chloride workshops and outreach (60 hours)
   b. Other?

4. **NEMO (80 hours)**
   a. Forest Lake workshop (50 hours)
   b. St. Croix Workshop in partnership with Watershed Partners (30 hours)

5. **Other?**
Welcome Lauren Haydon!
New education and BMP technician

Welcome to Lauren Haydon, a new education and BMP design technician at the Washington Conservation District who will be providing education support for the EMWREP partnership. Lauren has been working as a seasonal BMP and landscape technician since April and helped out with many EMWREP events during the fall.

Lauren graduated from the University of Minnesota, Twin Cities with a B.S. in Environmental Sciences, Policy and Management in 2016. Prior to this position, she worked at the Capitol Region Watershed District and Mississippi Watershed Management Organization. She’s already hit the ground running, designing new materials for our site visits and homeowner packets and co-teaching two prairie maintenance workshops in February.

Contact Lauren at: lhaydon@mnwcd.org

Shoreline Workshop for Realtors
April 5: 8:30am-12:30pm

Due to the high level of interest in our Shoreline Realtor workshops last year, we’ll be holding another workshop this spring: Thursday, April 5, 8:30am - 12:30pm

This workshop for realtors, appraisers and other real estate professionals provides information about shoreland and riverway rules, as well as best practices for shoreline landscaping.

The event is co-taught by EMWREP, St. Croix River Association, and the Minnesota DNR. Please spread the word to realtors selling lake and river properties in your area.

Register at: stcroixriverassociation.org/events

Above: During the workshop realtors will learn about shoreline landscaping and development rules.
This spring, we’re teaming up with Sustainable Stillwater MN and the Lily Lake Association to pilot an Adopt-a-Raingarden program in Stillwater that can be expanded to other cities in the future. Our hope is to engage volunteers through a series of kick-off community events and then recruit them to “adopt” and continue maintaining gardens in their neighborhoods by weeding and cleaning out sediment and litter 2-3 times per year.

With a small grant from the Stillwater Foundation, we’ve created the following resources and materials to support the new program:

- Webpage with sign-up form and map of adoptable raingardens: mnwcd.org/AdoptARaingarden
- Flyer, doorhangers, planning and how-to check lists, volunteer sign-up and liability waiver - adapted from the Watershed Partners community cleanups kit
- Logo and template for small signs to place in gardens
- Customized safety vests for clean-up events

**Kick-off events this spring**

We’re kicking off the new program in Stillwater with three events this spring:

1) **Hands-on training:** for team leaders  
   Sat., April 14, 10am-noon

2) **Earth Day clean-up event:**  
   Sat., April 21, 10am-noon  
   - Sustainable Stillwater MN and Lily Lake Association will be leading teams of volunteers to clean-up city raingardens by removing sediment from inlets, picking up litter, and cutting down dead plant matter.

3) **Team weeding event:**  
   Thu., June 7, 6:30-8pm  
   - Sustainable Stillwater and Lily Lake Association will be leading teams of volunteers to weed raingardens cleaned out in the spring. WCD staff and Master Gardeners will help to ID weeds.
Professional Training Opportunities

Harmful Algal Blooms in Minnesota: Thu., March 29, 8am-4:30pm at St. Anthony Falls Lab
Grant, and MN Science Museum
* Learn the latest research, monitoring and education on harmful algal blooms from scientific experts
working on lakes and streams around MN. Register at: z.umn.edu/mnalgae2018 $40/person

Smart Salting, Level 2 Trainings: For department heads or lead maintenance staff
* Learn how to use the new winter maintenance assessment tool (WMAt) to analyze your current
practices and identify opportunities for cost-savings.
- March 29, 8:30am - 1pm at Rice Creek WD office in Blaine. RSVP to Beth Carreno
- April 11th, 8am – 12:30pm at MnDOT Training Center in Shoreview. RSVP to Sage Passi

Watershed Partners & St. Croix Workshop on the Water: Wed., June 13, noon-4pm
* Save-the-Date and stay tuned for info and registration details.

Lawn & Garden Presentations for the Public

Upcoming presentations and workshops led by our partners and friends:

Turf Talks in Forest Lake
CLFLWD - 44 Lake St. S
• Mon., March 5, 6-7:30pm
• Tue., March 6, 6-7:30pm
• Mon., March 12, 6-7:30pm
• Tue., March 13, 6-7:30pm
• Mon., March 19, 6-7:30pm

Smart Irrigation Event
Woodbury Central Park
 Wed., March 14, 7-7:30pm
* Learn about water conservation and how to properly install and program a smart irrigation controller.

Turf Alternatives Workshop
Freedom Park in Prescott, WI
Wed., March 28, 12:30-2:30pm
* This workshop by Blue Thumb - Planting for Clean Water will explore turf alternatives including low-mow and bee-friendly lawns.

St. Croix Oak Savanna Chapter of Wild Ones
All presentations are held at FamilyMeans in Stillwater (1875 Northwestern Ave. S.)
Tuesdays, 7-8:45pm

Prairies & Wild Bees - March 20
* Julia Brokaw, wild bee researcher at University of MN Cariveau Bee Lab, will discuss seed mix design, plant establishment and how to increase nesting habitat for bees in prairie landscapes.

Rare Plants - April 17
* Jason Husveth, principal ecologist at Critical Connections Ecological Services, will talk about rare plants in northern Washington County and the St. Croix Valley.

Landscaping with Native Plants - May 15
* Kathy Widin, former municipal forester and expert plant pathologist, will offer advice for landscaping with native plants in a home and garden setting.
Joy Park in Maplewood
During 2016-17, we worked with city staff to design and install four interpretive signs at Joy Park on Silver Lake. Key messages for each sign, included: 1) History of the area; 2) Wildlife and habitats; 3) Shorelines and native plants; and 4) Keeping water clean. Funding was provided by Valley Branch WD through a MN Clean Water grant.

Sally Manzara Interpretive Nature Center
Last year, Valley Branch WD and Washington CD staff met with the founder of this new nature center being built at Sunfish Lake Park in Lake Elmo. The building will include information about the park, lake and natural history in the area, and we worked with nature center staff to create an interpretive panel about our organizations.

Dodge Nature Center
A few years ago, Dodge Nature Center acquired by donation 140-acres of land in Cottage Grove, known as the Shepard Farm. They are currently working with South Washington WD and Washington CD to convert 10-acres of cropland to prairie, and design stormwater management for a new driveway and parking area. In the future, we hope to partner with Dodge on educational programming for children and adults and to demonstrate permiculture and other sustainable farming practices.

Landscape Revival in Oakdale - June 9
Saturday, June 9, 9am-2pm

New this year! The Landscape Revival - Native Plant Expo and Market will be held at Richard Walton Memorial Park in Oakdale. During the event, gardeners can shop for native plants from six local growers, enjoy food and entertainment, and get advice from experts at Washington Conservation District, Master Gardeners, and other organizations.

Co-sponsored by St. Paul Audubon Society, Blue Thumb - Planting for Clean Water, and Wild Ones.

Learn more at: www.saintpaulaudubon.org/2018-landscape-revival-native-plant-expo-market
EMWREP will continue to focus on three main activities in 2018: 1) Educating and engaging the public; 2) Providing education and outreach support for partner cost-share programs and project implementation; and 3) Professional training for businesses and local government.

Here are highlights of new activities planned for 2018:

**Training and engaging volunteers:** Between now and this summer, the eight Master Water Stewards currently in training will be completing their course work and developing their capstone projects. We’ll be working with the stewards to complete their projects over the summer and they will receive certification in November. This summer, we’ll also begin recruiting 12 new stewards for 2018-19, who will begin classes in October.

In addition to our Master Water Stewards, we hope to develop a volunteer network to more intentionally recruit, train, and utilize volunteers from Master Gardeners, Master Naturalists, the St. Croix Watershed Stewards program, and other complimentary programs.

**One Watershed, One Plan:** Partners in the Lower St. Croix Basin, which encompasses portions of Anoka, Chisago, Isanti, Pine, and Washington Counties, will soon be working together to develop a large-scale watershed plan that will combine existing plans, identify gaps, and find opportunities for regional collaboration. As the process moves forward, EMWREP staff will likely provide support for outreach and engagement, including:

- Compiling and summarizing feedback gathered from public and stakeholders during other water planning processes (ie. watershed plan updates, MN 25by25, county comp plan updates)
- Creating a simple survey to gather additional input from the public and other stakeholders
- Developing a short presentation and accompanying questions for partners to use at community meetings; and
- Creating templates for press releases, e-mails, and social media.

**MS4 Toolkit:** MPCA will be providing $50,000 in funding to update the MS4 Tookit, created in 2008. For this project, we will review existing materials; create new materials as needed, including videos, brochures, and multi-lingual resources; and upload these resources to the MPCA Stormwater Wiki so that they are available to MS4 entities in our area and throughout the state.

**Groundwater education:** Lauren Haydon will continue to teach groundwater classes for 4th and 5th grade classes in Washington County. In addition, EMWREP plans to hold a Project WET teacher training this summer to share new curriculum developed by Race2Reduce, as well as the K-12 Watershed Game and groundwater-themed lessons.

EMWREP will also provide education support to cities to help implement water efficiency programs in partnership with Washington County.

**Rural and agricultural outreach support:** This year, EMWREP hopes to conduct audience research, identify connections, and develop new relationships to increase the number of agricultural landowners implementing BMPs, converting to perennial crops, and participating in the MN Ag Water Quality Certification program.
Clockwise from top: 1) Citizens shoveling snow - one of hundreds of new photos available for use through the Watershed Partners Clean Water MN campaign. 2) Lauren Haydon teaching 4th graders at Oakdale Elementary about groundwater. 3) Marine on St. Croix residents at a “25by25” community water meeting in October. 4) Cole Williams, one of the Master Water Stewards in training for South Washington WD. 5) Pam Arnold, a Scandia farmer who recently became certified through the MN Ag Water Quality Program.

Questions?
Contact Angie Hong, EMWREP coordinator, 651-330-8220 x.35 or angie.hong@mnwcd.org
“Can I put in a retaining wall?”
“Can I add a second story?”

Do you get questions like these about properties in floodplain, shoreland, or riverway districts?

Join the Minnesota DNR, St Croix River Association, and East Metro Water Resource Education Program to learn answers to questions that shoreland property owners have!

Tickets: $32
Earn CE Credits!
stcroixriverassociation.org/events

April 5th, 2018
8:30am - 12:30pm
Breakfast included!
Washington County Govt. Center
Stillwater, MN
2017 Annual Report

Above: (Clockwise from upper left) St. Croix Boom Site Clean-up participants; Campfire program at St. Croix Bluffs Regional Park; Master Water Stewards’ learn about Brown’s Creek improvement projects; New yard signs.

Members of the East Metro Water Resource Education Program:

Brown’s Creek Watershed • Carnelian-Marine-St. Croix Watershed • Comfort Lake-Forest Lake Watershed • Cottage Grove • Dellwood • Forest Lake Grant • Hugo • Lake Elmo • Middle St. Croix Watershed • Newport • Oak Park Heights • Oakdale Ramsey-Washington Metro Watershed • Rice Creek Watershed • South Washington Watershed Stillwater • St. Paul Park • Valley Branch Watershed • Willernie • West Lakeland Woodbury • Washington Conservation District • Washington County
# East Metro Water Resource Education Program
## 2017 Annual Report

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About the East Metro Water Resource Education Program

Background: The East Metro Water Resource Education Program (EMWREP) is a partnership formed in 2006 to implement a comprehensive water education and outreach program for the east metro area of St. Paul, MN. Current EMWREP partners include:

- Washington Conservation District (host)
- Washington County
- Cities and townships: Cottage Grove, Dellwood, Forest Lake, Grant, Hugo, Lake Elmo, Newport, Oakdale, Oak Park Heights, Stillwater, St. Paul Park, Willernie, and Woodbury, West Lakeland Township

Purpose: The purpose of the shared education program is to educate community residents, businesses, staff and decision-makers about issues affecting local lakes, rivers, streams, wetlands and groundwater resources and to engage people in projects that will help to protect and improve the health of these water resources.

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

Staff: Angie Hong is the EMWREP program coordinator. Additional education support in 2017 was provided by Jenn Radtke and Lauren Haydon.

Coordination with Other Regional Education Efforts: The EMWREP partnership helps to strengthen relationships between Washington Conservation District, Washington County and the eight watershed management organizations and 14 cities that constitute the partnership. This translates into better coordination and less overlap in the management of local water resources.

EMWREP staff provide leadership for Watershed Partners (a collaborative of more than 60 non-profit and public entities in the Twin Cities metro area), work actively with organizations in the St. Croix Basin, and participate in the Blue Thumb partnership and Master Water Stewards program.

Accolades: EMWREP was the 2012 MAWD Watershed Program of the Year.
2017 Executive Summary

Public Education and Engagement: EMWREP continues to lead water education efforts in the East Metro area through outreach, community engagement, public education, and media communications. Highlights from 2017 include:

1. **Public education**: Eight (8) landscaping workshops; four (4) backyard tours; ten (10) family nature events; and 15+ community events.
   - **Highlights**:
     i. Landscaping workshops in North St. Paul, St. Paul Park, Oakdale, Hugo, Forest Lake and Woodbury
     ii. Raingarden maintenance workshops in Stillwater and Forest Lake
     iii. AIS Identification workshops in Forest Lake, Big Marine and Lake Elmo
     iv. Clean the Croix – river clean up and buckthorn pull with 60 participants
     v. BCWD 20th Anniversary & WCD 75th Anniversary events

2. **Volunteer engagement**:
   - **Master Water Stewards**: With state funding, EMWREP recruited eight citizens to become Master Water Stewards and will be recruiting 12 additional stewards in 2018. Stewards complete 50-hours of training and a capstone project to become certified and volunteer 25-50 hours per year to support local watershed work.
   - **AIS Detectors**: We used county funds to train nine local residents as aquatic invasive species “AIS Detectors”, through a partnership with University of MN.
   - EMWREP continues to work in partnership with Washington County Master Gardeners and to provide support for education initiatives led by St. Croix Watershed Stewards.

3. **Youth education**: Staff taught lessons about groundwater and watersheds to more than a dozen 4th and 5th grade classes; led activities at Cottage Grove and Woodbury Safety Camps; and provided support to Ramsey-Washington Metro Watershed District to engage 500 students in planting a raingarden at Woodbury Elementary.

4. **Media and communications**: Angie Hong continued to write weekly articles about water and conservation for local newspapers (www.eastmetrowater.areavoices.com). Through Watershed Partners, we created a new blog-style website (www.cleanwatermn.org) with monthly articles about local water heroes.

Outreach Support for Project Implementation: EMWREP staff provide support for Clean Water grants and other partner projects, in addition to promoting cost-share incentive programs. Examples from 2017 include:

- **Green Communities**: Completing a three-year grant project to conduct audience research and install stormwater reduction practices at five Homeowners’ Associations (HOAs) in Washington County
- Helping Brown’s Creek WD to plan and promote its 20th anniversary event
- Organizing a neighborhood gathering at Hay Lake in Carnelian-Marine-St. Croix WD
- Conducting a raingarden maintenance training for cost-share recipients in Comfort Lake – Forest Lake WD and Rice Creek WD
- Helping Middle St. Croix WMO to develop a community engagement plan for Lily Lake
- Helping Ramsey-Washington WD staff to plant a raingarden at Woodbury Elementary
• Meeting with landscape architects to develop a vision for new park space and an interpretive center at South Washington WD’s Glacial Valley Park in Woodbury.
• Working with Valley Branch WD and City of Maplewood to design and install four interpretive signs at Joy Park on Silver Lake
• Providing education support for Washington CD outreach to farmers
• Helping Washington County to develop education activities for its Groundwater Plan

In addition, outreach and education helped to support:
• 257 landowner site visits with Conservation District staff
• 57 new projects installed with watershed cost-share grants
• 79.18 pounds of phosphorus (P) kept out of surface waters (all projects combined)

**Professional Trainings for Business and Local Government:** EMWREP provides professional training for businesses and local government through Stormwater U, NEMO, and other partnerships. Training partners include Minnesota Extension, the University of Minnesota Erosion and Stormwater Management Certification Program, the Minnesota Erosion Control Association (MECA), Fortin Consulting, St. Croix River Association, and the Minnesota Department of Natural Resources (DNR). Professional trainings in 2017 included:
• Turfgrass management & Winter maintenance workshops
• Illicit discharge detection and elimination (IDDE) workshop and presentations
• Stormwater volume control & bioretention design workshop
• Shoreline workshops for realtors
• Business BBQ
• Watershed Partners monthly meetings
• St. Croix River Workshop on the Water

**New Materials and Resources:** During 2017, EMWREP created new materials and resources to support water education. Highlights include:
1. **Neighborhood Clean-up Engagement Kit:** This kit, developed in partnership with Metro Watershed Partners includes doorhangers, sign-up forms, step-by-step instructions and other materials to help local residents and community groups organize neighborhood “storm drain” clean-up events.
2. **Yard Signs:** “This yard is part of the solution” - These signs come in four different colors and designs and are sold for $3 each or two for $5.
3. **NEW High quality photos:** Through the Watershed Partners new media campaign we now have a collection of more than 100 new high quality photos to help illustrate common water education topics (ie. lawn care, winter salting, native plants, raking leaves out of the street, pet poop, etc.). The collection also includes in-action and people photos.
4. **Table-top banners:** EMWREP has four new table-top pop-up banners available for partners to borrow: AIS, Pollinators, Lawn Care, and Ag Practices for Soil Health. The banners are light-weight and retract to fit in small carrying bags.
5. **Interactive groundwater displays:** Two new groundwater displays developed in 2016 got lots of use in 2017. One features information about groundwater resources in Washington County, while the other focuses on water conservation. Both are hands-on and fold-up into wooden suitcases with wheels and handle for easy transport.
6. **Green Communities Guidebook:** This short guidebook summarizes feedback from focus groups conducted with homeowner association (HOA) residents, property management companies, and lawn care professionals and provides advice for engaging HOAs in clean water projects.
**Public Education and Engagement**

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<td>☐ Construction site runoff controls</td>
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<tr>
<td>✓ Public participation &amp; involvement</td>
</tr>
<tr>
<td>☐ Post-construction storm water management</td>
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<tr>
<td>✓ Illicit discharge detection and elimination</td>
</tr>
<tr>
<td>☐ Municipal pollution prevention &amp; good housekeeping</td>
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**Audience:** General Public, Urban and Rural Landowners, Youth

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

**Educational Objectives:**

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

Tree Workshop – taught in partnership with Minnesota DNR and US Forest Service.
- Oakdale – Feb. 23 (53 attendees)

Spring Landscaping Workshops – taught in partnership with Master Gardeners. Participants learned about lawn care and lawn alternatives, composting, and “Blue Thumb” projects – native gardens, raingardens and shoreline plantings.
- North St. Paul – April 6 (29 attendees)
- St. Paul Park – April 11 (20)
- Oakdale – April 18 (31)
- Hugo – April 27 (15)
- Forest Lake – May 2 (18)

Raingarden Maintenance Workshops
- Stillwater – July 20 (6 attendees)
- Forest Lake – Aug. 23 (33)

Buckthorn Workshop
- Woodbury – Sept. 19 (25 attendees)

Brown’s Creek Open Yards Series – hosted by members of the Brown’s Creek Watershed District Citizen Advisory Committee.
- May 24 - large lots: buckthorn, woodland wildflowers, native shrubs
- June 21 - large lots: septic systems, infiltration, weed management
- Aug. 23 - large lots: prairies
- Sept. 20 - urban/suburban lots: raingardens, weeds vs native plants

Family nature events: hands-on, outdoor events to teach children and adults about aquatic invertebrates and lake and river health
- Forest Lake - June 20 (Arts in the Park)
- St. Croix Bluffs Regional Park – June 24 (campfire program)
- Woodbury, Colby Lake - June 27
- Oak Park Heights, Autumn Hills Park - July 6
- North St. Paul, Silver Lake – July 8 (Silver Lake SPLASH)
- Oakdale, Tanners Lake - July 12
- Lake Elmo Park Reserve – July 15 (campfire program)
- St. Paul Park, Lions Park on the Mississippi River - July 18
- Stillwater, Long Lake - July 24
- Cottage Grove, Pinetree Pond - July 26

Sales (trees, plants, rain barrels, compost bins): EMWREP partnered with other organizations to promote sales and provide educational materials at these events.
- Rain barrel and compost bin sale – April 28, Hugo
- Tree sale – April 28-29, Lake Elmo
- Master Gardener plant sale - May 21, Lake Elmo
- Landscape Revival native plant expo and market - June 3, Roseville
Aquatic Invasive Species identification workshops: hands-on workshops taught in partnership with Comfort Lake – Forest Lake Watershed District staff using special funding from Washington County.
- Forest Lake – June 19 (18 participants)
- Big Marine Lake – June 29 (5 participants)
- Tri-Lakes in Lake Elmo – Aug. 15 (15 participants)

Community events: EMWREP partnered with other organizations to plan, promote, provide educational materials, and conduct educational programming at these events.
- Feb. 8 – Mahtomedi Garden Club spring event
- Feb. 11 – Phalen Freeze Fest (St. Paul)
- March 9 – Pollinator Forum (West St. Paul)
- April 22 – Grant Community Clean-up
- April 29 – Mahtomedi RITE of Spring
- May 20 – Belwin Bison Release (Afton)
- May 21 – Mill Stream Day (Marine on St. Croix)
- June 3 – WaterFest (Lake Phalen – St. Paul)
- June 22 – Oakdale Summerfest Parade
- July 8 – Boomsite Cleanup (Stillwater Twp.)
- Aug. 2-6 – Washington County Fair (Lake Elmo)
- Aug. 13 – Newport Pioneer Day
- Aug 24 – Sept. 4 – Minnesota State Fair
- Sept. 6 – Stillwater Community Water Meeting
- Sept. 10 – PolliNATION (Stillwater Twp.)
- Sept. 16 – Brown’s Creek 20th Anniversary Event (Stillwater)
- Sept. 17 – Washington Conservation District 75th Anniversary Event (Lake Elmo)
- Sept. 21 – Cottage Grove Public Works Open House
- Oct. 5 – Governor’s Water Town Hall (Stillwater)

Presentations: presentations given by EMWREP staff at community meetings and events
- Feb. 7 - Daylily and Trillium Garden Clubs Meeting (Stillwater)
- Feb. 16 - Great Rivers Confluence Symposium (Afton-Hastings-Prescott-River Falls)
- Feb. 27 – Tri-Lakes annual meeting (Lake Elmo-Oakdale)
- Sept. 27 – Marine on St. Croix Community Water Meeting

2) Volunteer engagement:

Master Water Stewards: In 2017, EMWREP received a Clean Water Fund grant to recruit and train two cohorts of Master Water Stewards in our area (20 volunteers total) in partnership with Freshwater Society. Stewards go through 50-hours of training and complete a capstone project to become certified. After that, they volunteer 50-hours the first year and 25 hours per year thereafter to remain certified. During the first year of the grant project we:
- Developed recruitment materials, held two information sessions, and offered invitations to participate to 13 applicants. Of those, ten people elected to join the program and eight are still participating as of February 2018.
- Secured a GreenCorps member to help develop the program.
• Worked with Freshwater Society to develop new curriculum to teach stewards about rural watershed issues and best management practices such as habitat restoration, invasive species management, and shoreline restoration.

• Current program participants include:
  1) Carnelian-Marine-St. Croix WD - John Goodfellow (Marine)
  2) Comfort Lake – Forest Lake WD - Tom Furey (Scandia)
  3) Middle St. Croix WMO - Sally Arneson (Stillwater and Lakeland) and Drew Chirpich (GreenCorps)
  4) South Washington WD – Cole Williams (Newport); Joan Nichols, Nathan Zerbe and Susan Goebel (Woodbury)

• Classes taught to stewards in 2017 included:
  1) Info sessions in August and September
  2) Introductory meeting - Oct. 10
  3) On-line capstone primer
  4) County watershed tour - Oct. 14
  5) Basic hydrology - Oct. 24
  6) Stormwater basics - Nov. 14
  7) Water policy - Nov. 28

• In 2018, the current stewards will take classes in environmental decision making, community engagement, rainscaping, residential stormwater management, and BMP evaluation and maintenance. They will also complete their capstone projects by November 2018. EMWREP will recruiting 12 new stewards for the 2018-19 cohort this summer and fall.

AIS Detectors: Last year, we used Washington County aquatic invasive species (AIS) funds to train nine local residents at AIS Detectors, through a partnership with the University of Minnesota. The program offers 6-8 hours of on-line training and one full-day, in-person training to help citizens learn how to identify invasive aquatic plants including Eurasian watermilfoil, hydrilla and starry stonewort; invasive invertebrates including spiny waterflea, rusty crayfish, zebra mussels, and quagga mussels; and invasive fish including bighead carp, silver carp, round goby, and ruffe. Volunteers received a certificate upon completion of training and will now be asked to provide 25 hours per year of volunteer work to help address local AIS issues.

AIS Detectors in Washington County include:
  1) John Bower - Big Carnelian (CMSCWD)
  2) Jeff Dahlberg - Big Marine (CMSCWD)
  3) Tony Vavoulis - Big Marine (CMSCWD)
  4) Sam Hathaway – Bone (CLFLWD)
  5) Gary Lee – Clear (RCWD)
  6) Link Lavey - Demontreville/Olson (VBWD)
  7) Dale Dorschner – Elmo (VBWD)
  8) Del Peterson – Lily (MSCMWO)
  9) Mike Ziegelski – Sand (CMSCWD)
Engaging existing volunteer networks: EMWREP continues to work in partnership with Washington County Master Gardeners and to provide support for education initiatives led by St. Croix Watershed Stewards. During 2017, EMWREP:

- Co-taught spring landscaping workshops with Master Gardeners and helped to promote the Master Gardener plant sale.
- Provided flyers and storm drain stenciling materials for St. Croix Watershed Steward Jack MacKenzie, and also helped to promote MacKenzie’s spring lawn care workshops.

3) Youth education:

Groundwater education: With special funding from Washington County, EMWREP staff provided groundwater education for more than a dozen school and youth groups in 2017:

- Staff taught lessons using the groundwater model and K-12 Watershed Game to 13 4th and 5th grade classes at the following schools:
  - Oakdale Elementary
  - Castle Elementary (Oakdale)
  - Eagle Point Elementary (Oakdale)
  - Crestview Elementary (Cottage Grove)
- EMWREP also led groundwater education activities for Washington County 4H Project Discovery (March 11), Trout in the Classroom Summit (March 17), Maplewood Middle School Field Day (May 26) and Children’s Water Festival (Sept. 27).

Stormwater and watershed education:
- Woodbury Elementary field trip to Battle Creek Lake – March 1
- Woodbury Elementary raingarden field day - May 4
- Storm drain stenciling with Natural Sciences Academy in St. Paul Park - May 31
- Camp Clue stormwater pollution prevention activity at Cottage Grove and Woodbury Safety Camps – June 21 and July 19
- Woodbury Elementary raingarden planting with 500+ students – Oct. 4, 5, 10

4) Media and communications:

Newspaper articles: Angie Hong continues to write articles about water and conservation for local newspapers. Read them on-line at www.eastmetrowater.areavoices.com. For a list of articles sent to each paper in 2017, see Appendix B.

*There have been significant changes at most of the local newspaper companies over the past 12 years, including frequent staff turnover, elimination of local offices, and reduction in the frequency of printing. This has made it difficult to publish regular content in many EMWREP partner communities.
• **Chisago Press** (Circulation - 3963) – 4 articles
• **Forest Lake Lowdown** (Circulation – 13,997) – 2 articles
  o Staff writer Jackie Bussjaeger also attended and wrote articles about several watershed events.
• **Forest Lake Times** (Circulation - 13,029) – 21 articles
  o In September of 2017, Forest Lake Times changed its format to incorporate a new, ad-free editorial page with a slate of rotating columnists. From now on, they will be publishing our articles in this section once a month.
• **Hugo Citizen** (Circulation – 14,500) – 4 articles
• **Oakdale-Lake Elmo Review** (Circulation – 11,066) – 17 articles
  o There have been significant staff changes at the Review papers.
• **Ramsey Review** (Circulation – 24,326) – 4 articles
• **Scandia Country Messenger** (Circulation - 1075) – 14 articles
  o There have been significant staff changes at the Bulletins and there is no longer a local editor for either.
• **South Washington County Bulletin** (Circulation - 8616) – 10 articles
  o There have been significant staff changes at the Bulletins and there is no longer a local editor for either.
• **St. Croix 360** (On-line: 25,647 followers) – 1 article
• **St. Croix Lowdown** (Circulation – 5000) – 3 articles
  o This paper also runs articles from the Forest Lake Lowdown and Scandia Country Messenger on occasion.
• **Valley Life edition of Stillwater Gazette** (Circulation - 17,479) – 47 articles
• **White Bear Press** (Circulation – 19,331) – 3 articles
• **Woodbury Bulletin** (Circulation - 7811) – 13 articles

**Newsletters:** EMWREP also provides content for city, watershed and WCD newsletters.

• **Afton** (pop. 2800) - [newsletters](#)
  o Jan – tree workshop
  o Feb – tree workshop
  o March – spring dreaming
  o May – Protect clean water/adopt a drain (?)
  o Sep – Master Water Stewards
  o Oct – MSCWMO cost share promotion
  o Nov – CWMA Grant
• **Bayport** (pop. 3200)
  o Spring – Clean Water Funds (MSCWMO) and Help Stop Invasive Species
  o Summer – Smart Outdoor Water Use and MSCWMO Cost Share Promotion
• **Birchwood** (pop. 875) - [newsletter](#)
  o Summer – Illicit Discharge
• **Browns Creek Watershed District** – content for annual newsletter
• **Carnelian-Marine-St. Croix Watershed District** – content for annual newsletter
• **Cottage Grove** (pop. 34,000) - [newsletter](#)
  o Jan – tree workshop
  o April – Arbor Day event and Hyvee/SWWD stormwater award
  o Dellwood
  o Dec – Stormwater pollution prevention program
• **Lakeland** (pop. 1830) - [newsletter](#)
  o Feb – Tree workshop
  o March – Spring Dreaming Workshop
  o April – Spring Dreaming Workshop
November – MSCWMO Cost Share
- Mahtomedi (pop. 8000) - newsletter
  - Spring (Green Talk) – Spring dreaming workshop
- Oakdale (pop. 27,726) – newsletter
  - Summer – Tanner’s Lake Pond Dipping
- Oak Park Heights (pop. 4724)  - newsletter
  - March – Spring Dreaming workshop
  - Sep – MSCWMO cost share promotion
  - Stillwater (pop. 18,000) - newsletter
  - Summer – Tanner’s Lake Pond Dipping
- St. Paul Park
  - Spring- Family Pond dipping
- Washington Conservation District – content for bi-annual newsletters
- White Bear Lake (pop. 24,555) - newsletter
  - Sep – Cost Share Grants (Advertised for all four WD/WMO)
- Woodbury
  - Sep – cost share promotion for irrigation heads

**Minnesota Water – Let’s Keep it Clean**: This campaign is a project of Watershed Partners, which is a partnership of more than 60 non-profit and public entities in the Twin Cities metro area that work together to provide education about stormwater pollution. The new blog-style website (www.cleanwatermn.org) features monthly articles about local water heroes and partners are provided with customized links to post and track the readership of these articles through their own social media networks.

EMWREP and its partners provide funding support for the Minnesota Water – Let’s Keep it Clean campaign and Angie Hong serves as a steering committee member and the large group meeting facilitator.

Articles for 2017 included:
- Jan. – The Iceman Cometh: Sidewalk salt pollutes our lakes and streams
- Feb. – Recent immigrants become water stewards
- March – Tree-huggers unite: Protecting urban tree canopies
- April – Planting native seeds with a new generation
- May – Rain barrels herald spring
- June – Organic lawn care and maintenance yields field of dreams
- July – What’s in a ribbet? Frogtown frogs signal environmental health
- Aug. – Going native with shoreline restoration
- Sept. – Urban agriculture spawns North Side enterprise
- Oct. – Improving health and the planet with organic lawn care
- Nov. – Becoming a Mississippi River water quality action hero
- Dec. – Friends turn stormwater problem into a cistern solution
Websites and Social Media:

- **East Metro Water**
  - Blog website: [www.eastmetrowater.areavoices.com](http://www.eastmetrowater.areavoices.com)
  - 11,378 visits in 2017
  - Twitter followers
    - @angiehongwater – 360
    - @EMWREP - 261

- **Washington Conservation District**
  - Website: [www.mnwcd.org](http://www.mnwcd.org)
  - 18,500 visits from 15,700 unique visitors
  - Facebook: [www.facebook.com/mnwcd](http://www.facebook.com/mnwcd)
    - 476 page likes
    - Ads purchased in 2017:
      - Rain barrel and compost bin sale (795 people reached)
      - St. Paul Park and Oakdale workshops (2589 people reached)
      - AIS Fishing opener (4039 people reached)
      - Fall hunting AIS prevention (16,178 people reached)
  - Instagram: wcd_mm
    - 101 followers

- **Blue Thumb**
  - Website: [www.bluethumb.org](http://www.bluethumb.org)
    - EMWREP provides financial support for the Blue Thumb program partnership, website, events, and outreach materials.
    - Web resources for the public include a plant selector tool, map of landscape designers and native plant nurseries, calendar of events, raingarden and shoreline how-tos, and grant info.
    - During 2017, Blue Thumb also produced three blog/print articles about landscaping for clean water:
      - [Backyard conservation](#)
      - [How cities can manage climate change](#)
      - [Plant a tree: Invest in the urban environment](#)
  - Facebook: [www.facebook.com/BlueThumbMN](http://www.facebook.com/BlueThumbMN)
    - 1328 page likes
  - EMWREP has also helped BCWD, CMSCWD, and SWWD to create and manage Facebook accounts

**Local television programming:** A videographer from South Washington Telecommunications Commission (SWCTC) attended the Pond Dipping event in St. Paul Park and produced a short program for local television.

- **Pond Dipping Event Lion's Levee Park** - [https://youtu.be/Xv0jt3-pHIY](https://youtu.be/Xv0jt3-pHIY)
Outreach Support for Project Implementation

<table>
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<tbody>
<tr>
<td>☑ Public education &amp; outreach</td>
</tr>
<tr>
<td>☑ Public participation &amp; involvement</td>
</tr>
<tr>
<td>☐ Illicit discharge detection and elimination</td>
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Program Goals:
1. Publicize EMWREP partner programs and projects.
2. Promote BMP (Best Management Practices) and cost-share incentive programs.
3. Engage community members and other stakeholders to help meet water quality goals identified through local water plans, TMDL (Total Maximum Daily Load) studies, WRAP (Water Restoration and Protection) strategies, and other regulatory programs.
4. Engage public and private land owners to complete activities funded through state and federal grants.

Educational Objectives:
1. Citizens will be aware of water-quality improvement projects and programs happening in their communities and understand the benefits of these activities.
2. Citizens will be aware of and utilize BMP and cost-share incentive programs to complete water protection projects on their land.
3. EMWREP will help partners to identify, reach out to, and engage public and private landowners and managers in targeted locations in order to complete water resource improvement and protection projects.
OUTREACH AND PROJECT SUPPORT IN 2017

1) Promotion of watershed BMP and cost-share incentive 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. In 2017, outreach and education helped to support:

- 257 landowner site visits with Conservation District staff
- 57 new projects installed with watershed cost-share grants
- 79.18 pounds of phosphorus kept out of surface waters (all projects combined)

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

2) Special grants

Green Communities: In 2014, the Washington Conservation District was awarded a $50,000 Clean Water Fund Grant from the MN Board of Water and Soil Resources to conduct audience research and develop clean water projects with Homeowners’ Associations (HOAs) in Washington County. The grant included funding to conduct focus groups with HOA board members, property managers, and lawn care companies, and to complete stormwater reduction projects with five HOA properties in Washington County.

EMWREP staff managed this grant, led education and outreach efforts, and prepared the Green Communities Guidebook. Work was completed in 2017. Projects installed included:

- Evergreen Country Homes in Woodbury (RWMWD) - 2 vegetated swales; 2935sq ft; 0.34 lb/yr of phosphorus
- Lakeridge Townhomes in Woodbury (RWMWD) - Raingarden & bioinfiltration; 350 sq ft; 0.11lb/yr of phosphorus
  - Neighborhood celebration held on May 31, 2017
- Powers Lake Townhomes in Woodbury (SWWD) - vegetated swale; 600sq ft; 0.14lb/yr of phosphorus
- Tanners Lake Townhomes in Oakdale (RWMWD) - shoreline buffer; 3,094 sq ft; 0.27lb/yr of phosphorus
- Heritage Glen in Woodbury (SWWD) - plant buffer/vegetated swale; 5200 sq ft; 1.2 lb/yr of phosphorus

3) Education and outreach support for partner projects and programs

Brown’s Creek Watershed District

- Helped to plan and promote the 110th St. public open house on April 18.
- Helped to plan, promote, and conduct activities for the BCWD 20th anniversary event on Sept. 15.
- Collaborated with citizen advisory committee to plan and promote Open Yards series.
Carnelian-Marine-St. Croix Watershed District
• Organized a neighborhood gathering with Hay Lake residents to talk about lake water quality and promote cost-share projects.
• Created a watershed survey for people attending the Mill Stream Festival.

Comfort Lake – Forest Lake Watershed District
• Attended the watershed district open house on Feb. 21.
• Helped to plan and publicize the watershed tour on May 6.
• Conducted a raingarden maintenance training for cost-share recipients on Aug. 23.
• Helped WCD staff to conduct outreach to landowners surrounding Bone Lake

Middle St. Croix Watershed Management Organization
• Helped to develop a community engagement plant for the Lily Lake Final 45 grant project and held an open house on July 11.
• Engaged local citizen groups to begin developing an Adopt-a-Raingarden program for Stillwater.

Ramsey-Washington Metro Watershed District
• Provided support to prepare and lead 500+ students in planting a new raingarden at Woodbury Elementary.

Rice Creek Watershed District
• Conducted a raingarden maintenance training for cost-share recipients on Aug. 23.

South Washington Watershed District
• Met with landscape architects to develop a vision for new park space and an interpretive center at Glacial Valley Park in Woodbury.

Valley Branch Watershed District
• Worked with staff from the City of Maplewood to design and install four interpretive signs at Joy Park on Silver Lake.
• Developed content for interpretive panels at the new Sally Manzara Interpretive Nature Center in Lake Elmo.

Washington Conservation District
• Helped to recruit five local farmers to become certified through the MN Agricultural Water Quality Certification Program
• Provided education match for the cooperative weed management program

Washington County
• Provided education support to help the county implement its Groundwater Plan by teaching lessons at local schools and conducting a groundwater education needs assessment.
Professional Trainings for Business and Local Government

**Minimum Control Measure Addressed**

| ☐ Public education & outreach | ☑ Construction site runoff controls |
| ☐ Public participation & involvement | ☑ Post-construction storm water management |
| ☑ Illicit discharge detection and elimination | ☑ Municipal pollution prevention & good housekeeping |

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

**Program Goals:**
1. Provide technical training to help EMWREP partners meet MS4 Permit requirements and reduce stormwater pollution.
2. Work in partnership with University of Minnesota to provide high-quality professional education at a local level.
3. Provide local decision makers (city councils, planning commissions, watershed boards, county commissioners, etc.) with information and training needed to implement policies, programs, and practices that protect and restore water resources.
4. Offer professional trainings for area business owners, realtors, lawn care providers, and winter maintenance contractors to share information about local water issues and encourage business practices that protect surface and groundwater resources.

**Educational Objectives:**
1. Municipal employees will understand that stormwater runoff, erosion, and illicit discharge contaminate surface and groundwater resources and, also, that there are best management practices to reduce these causes of water pollution.
2. Local decision makers will understand that land use impacts water quality and that there are a variety of policies, programs and practices cities, counties, and watershed management organizations can implement to protect their water resources.
3. Area business owners, realtors, lawn care providers, and winter maintenance contractors will learn how to conserve groundwater resources and reduce surface and groundwater pollution through a variety of practices, including:
   a. Completing water efficiency audits;
   b. Talking with home buyers and sellers about shoreline landscaping, remodeling, and septic system maintenance;
   c. Mowing higher and using fewer lawn chemicals; and
   d. Reducing road salt application by using new technology, calibrating equipment, and adjusting anti-icing and deicing methods based on weather forecasts.
1) Training for local government staff and consultants

Turfgrass management
- April 5 workshop in Cottage Grove

Illicit Discharge Detection and Elimination (IDDE)
- May 11 workshop in Oakdale (WCD) – taught in partnership with University of Minnesota Erosion and Sediment Control Program
- Oct 18 staff training for Oakdale Public Works
- Oct 18 training for wastewater installers and operators in Stillwater

Winter Maintenance
- April 26 – Smart Salting Level 2 training in Shoreview (RWMWD)
- Nov. 2 – Smart Salting Level 1 training (parking lots and sidewalks) in Oakdale (WCD) – 32 attendees
- Certified contractors listed at: www.pca.state.mn.us/water/salt-application-training

Stormwater Volume Control & Bioretention Design
- April 25 workshop in Oakdale (WCD)
- Topics: new technology, lessons learned, soil amendments, and best practices for installation and maintenance

2) Training for local decision makers

St. Croix River Workshop on the Water
- Sept. 14, Stillwater – 70 participants
- Topics:
  - Strategies on how to protect and prioritize water quality during development and landscaping projects
  - New trails and parks designed for the Lower Riverway:
    - Stillwater’s Aiple Park
    - Hudson’s plans for riverfront revitalization
    - Loop Trail
- Workshop partners: MN and WI DNRs, National Park Service, St. Croix River Association, University of Minnesota Extension

3) Training and outreach to local businesses

Shoreline realtor workshops – taught in partnership with St. Croix River Association and Minnesota DNR. Realtors received CEUs for attending.
- March 9 workshop in Stillwater – 45 attendees
- Nov. 16 workshop in Stillwater – 40 attendees
**Business BBQ** – May 23 at WCD office in Oakdale
- Approximately 100 people from local businesses attended.
- EMWREP staff visited local businesses in person to deliver invitations.
- During the BBQ attendees toured the building, viewed new clean water landscaping projects, and received information about cost-share grants.

### 4) Professional partnerships, meetings, and conferences

**Watershed Partners** – EMWREP and its partners contribute financial and staff support to Metro Watershed Partners, a partnership of 60+ public and non-profit organizations in the Twin Cities area. In addition to the public education campaign, Watershed Partners provides learning opportunities for water resource professionals through its monthly meetings. Presentation topics in 2017 included:
- Jan – Environmental justice
- Feb. – Communicating on issues of equity and diversity (special workshop)
- March – Twitter for communicators
- April – Community clean-ups for water quality & Adopt-a-Drain
- May – Volunteer management
- June – Metro surface water management act & Future of the Minnesota River (workshop on the Mississippi River)
- Aug. - North Minneapolis canoe-share program (experiential paddle and bike event)
- Sept – 25 x 25 community water meeting
- Oct. – Social media
- Nov. – Communicating about water resources and climate change (panel and roundtable)
- Dec. – Restoring the Mississippi River Gorge

**Water Consortium** – EMWREP staff help to plan topics and presenters for Washington County water consortium meetings.

**St. Croix Summit** – EMWREP staff helped to plan the annual conference in River Falls on April 21.

**Community resiliency planning** – EMWREP staff attended and helped to promote this two-part workshop on Sept. 26 and 28, which was led by South Washington and Ramsey-Washington Metro Watershed Districts, Freshwater Society, and Barr Engineering.

**Water Conservation Education Task-Force** – EMWREP staff attend meetings led by MN DNR to share ideas and resources about water conservation education.
1. Neighborhood Clean-up Engagement Kit

This kit, developed in partnership with Metro Watershed Partners includes doorhangers, sign-up forms, step-by-step instructions and other materials to help local residents and community groups organize neighborhood “storm drain” clean-up events.

EMWREP and other partners plan to pilot the kit in spring of 2018. We have also adapted the materials for our pilot Adopt-a-Raingarden program in Stillwater.
2. **Yard Signs**

“This yard is part of the solution” - These signs come in four different colors and designs and are sold for $3 each or two for $5. We worked with local artist Vera Wong to create the artwork and hope to install a metal sculpture with the same design along Lake McKusick in Stillwater.

3. **NEW High quality photos**

Through the Watershed Partners new media campaign we now have a collection of more than 100 new high quality photos to help illustrate common water education topics (ie. lawn care, winter salting, native plants, raking leaves out of the street, pet poop, etc.). The collection also includes in-action and people photos.

EMWREP partners can find and download photos at:  
[https://drive.google.com/open?id=1MAF97aqdkfv_U773WoXsAR9wpbKGi1Hf](https://drive.google.com/open?id=1MAF97aqdkfv_U773WoXsAR9wpbKGi1Hf)
EMWREP has four new table-top pop-up banners available for partners to borrow: AIS, Pollinators, Lawn Care, and Ag Practices for Soil Health. The banners are light-weight and retract to fit in small carrying bags.

---

**Healthy LAWN-CARE**

![Image showing tips for healthy lawn care]

**3 CHEAP TRICKS**

1. **Sprinkling**
   - Use smart sprinkler systems that include sensors and weather data.
2. **Fertilizing**
   - Opt for organic fertilizers.
3. **Cutting**
   - Mow the lawn shorter to reduce thatch build-up.

---

**Pollinators**

**Table-top banners**

- **AIS**
- **Pollinators**
- **Lawn Care**
- **Ag Practices for Soil Health**

**4. Table-top banners**

- **Native Plants**
- **Grow a bee-friendly garden**
- **Leave your gardens empty all winter**
- **Use a mower that leaves a residue to provide habitat for pollinators**

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**Help Prevent Aquatic Invasive Species**

**Table-top banners**

- **WaterSmart Grasses**
- **Drought Tolerant**
- **Pollinator Friendly**

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**Check in with YOUR growers about healthy, productive soils.**

Soil Health Management Systems can help America’s growers feed the nation and the world through sustainable conservation practices. The guide below provides an up-to-date view of specific sustainability benefits associated with soil health improving practices. It is important to note that not all practices are applicable to all crops. Some operations will benefit from just one soil health practice, whereas others may require additional practices for maximum benefit.

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**Soil Health Management Systems include:**

- **Conservation Crop Rotation**
- **Cover Crop**
- **No Till**
- **Mulch Tillage**
- **Mineral Management**
- **Nutrient Management**
- **Post Management**

---

**How does it help environmentally and economically?**

- **Soil Health** is essential for healthy ecosystems and productive farms.
- **Sustainability** is key to meeting the needs of current and future generations.
- **Economic Viability** is achieved by optimizing soil health and productivity.

---

**By following four basic soil health principles, producers can improve their soil health and sustainability:**

1. **Keep the soil covered as much as possible**
2. **Distribute the soil as little as possible**
3. **Keep plants growing throughout the year to feed the soil**
4. **Grow a variety of plants to diversify the soil**

---

**Learn more at:** www.mnwdc.org
5. **Interactive groundwater displays:** Two new groundwater displays developed in 2016 got lots of use in 2017. One features information about groundwater resources in Washington County, while the other focuses on water conservation. Both are hands-on and fold-up into wooden suitcases with wheels and handle for easy transport.

6. **Green Communities Guidebook:** This short guidebook summarizes feedback from focus groups conducted with homeowner association (HOA) residents, property management companies, and lawn care professionals and provides advice for engaging HOAs in clean water projects.
APPENDIX A: EDUCATION PROGRAM BUDGET FOR 2016-2018

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<tr>
<th>Staff Support and Overhead Expenses (1.5 FTE)</th>
<th>Materials</th>
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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.

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<thead>
<tr>
<th>PARTNER</th>
<th>Annual Contribution</th>
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<td>SWWD</td>
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### Appendix B: NEWSPAPER ARTICLES SUBMITTED IN 2017

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<td>10-Jul</td>
<td>All that glitters and is gold</td>
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<td>Turf and lakes in Forest Lake</td>
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<td>Aquatic Invasives – The Battle Continues</td>
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