

# From Shore to Shore

A publication of the University of Minnesota Extension Water Resources Team

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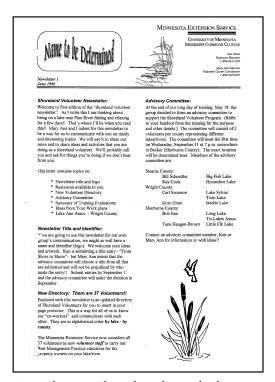
### Change is Constant ...

Karen Terry, University of Minnesota Extension, 218-770-9301, kterry@umn.edu

s with many things, the From Shore to Shore newsletter is changing, based largely on feedback from our February survey of you, our readers. This newsletter is transitioning from a bimonthly to a quarterly publication and we are phasing out the printed/mailed hard copy subscription option. Expect to see future *From Shore to Shore* newsletters announced via email and available to read online in spring, summer, fall, and winter, As always, the current and past issues are viewable online, and we encourage you to share the articles with others (hint: you can reprint articles in your own newsletters or share links via email). If you currently receive a hard copy of the newsletter in the mail, we hope that you will switch to an online subscription; this will be the last hard copy we send by mail. To make the switch, please send an email to Heidi Olson-Manska (olsonh@umn.edu) and ask to be added to the online subscribers list.

The survey results confirmed that the newsletter is getting read, shared, used. An impressive 43% of responders reported reading the newsletter from cover to cover all or most of the time, and 66% reported sharing it with others at least some of the time. An amazing 98% said they learn useful information at least some of the time, and 88% reported that they apply what they learn from the newsletter to their lives. About demographics: over 64% identified themselves as private citizens or lake association leaders; other categories with smaller percentages were natural resource managers, educators, government officials, and other.

We were happy to receive suggestions for future changes to the newsletter and topics to cover. We anticipate that the From Shore to Shore newsletter will stick around for quite a while, and with the help of your feedback, we



From Shore to Shore has changed a lot since its 1996 inception.

anticipate that it will do an increasingly good job of meeting our readers' needs. Thank you to all who took the time to provide feedback!

Lastly, we included a random drawing from survey participants who registered for our prizes. First prize went to Charlotte Quiggle of Maple Lake, who received a Lake Home and Cabin Kit (Second Edition). Second prize went to William Feyo of Aitkin, who received a Better Living on our Lakes and Rivers DVD set. Congratulations Charlotte and William!

#### Calendar of Events

For the most current calendar items and more details, visit ww.extension.umn.edu/ environment/water/calendar/.

Stream Shape and Function – All about Moving Water (specifically for Master Naturalist Volunteers and Trainers) Date: August 10

Location: Granite Falls, MN Contact: Karen Terry, kterry@umn.edu,

Low Impact Development Symposium Date: August 18-21 Location: St. Paul, MN **Website:** www.cce.umn.edu/2013-International-Low-Impact-Development-Symposium/index.html

2013 Clean Water Summit - Green Infrastructure for Clean Water: The Essential Role of People Date: September 12; 8:30am-4:30pm Location: Chaska, MN Website: www.arboretum.umn.edu/ 2013CleanWaterSummit.aspx

Water Resources Conference Date: October 15-16 Location: St. Paul, MN Website: http://wrc.umn.edu/

#### Inside...

- (2) Rain Garden in Baxter -Five Years Later!
- 3 Low Impact Development Symposium
- (4) SNAPSHOTS: Water Resources Team Programming and Research

#### Rain Garden at Fairview Office Park in Baxter - Five Years Later!

Jackie Froemming, University of Minnesota Extension Educator, 218-824-1068, froem022@umn.edu

Mhat I believe to be the largest rain garden in the Brainerd Lakes Area was planted at Fairview Office Park, an award-winning, conservation-design commercial site in Baxter, Minnesota in May of 2008. We were all excited: the site owners, the many volunteers, and me ... the Extension Educator who provided technical assistance with plant selection and landscape design.

We were excited about installing a rain garden to infiltrate stormwater runoff generated at the 4.5 acre commercial development rather than a retention pond. We were excited that this +8,000 sq. ft. rain garden would add natural beauty to this site and serve as a model for other commercial sites. (See the July/August issue of 2008 of From Shore to Shore http://shorelandmanagement.org/download s/july\_aug\_2008.pdf.

Are we all still excited about this rain garden? Yes! This rain garden is working like it should: it's dry within 48 hours of a rain event, including some intense, high volume rains. Having monitored this rain garden over five growing seasons, I would like to share some observations:

- LANDSCAPE DESIGN. People are not necessarily familiar with what desired plants look like when they are emerging in the spring, making weeding a challenge. A design that relies on native shrubs and native grasses would be easier to weed than one with mostly herbaceous perennials (forbs). A design with larger areas planted in a single species would also be easier to weed.
- MATERIALS. Finely shredded mulch will stay in place better than chunkier mulch during floods. Finely shredded mulch tends to form a mat that raises and lowers with the water level. Chunkier types float away and pile up wherever the wind blows them. Also, the size and quality of plants are important. Although more expensive, larger potted plants have more root mass and a higher rate of survival after the first year.



- MAINTENANCE. Although native species of vegetation tend to be lowmaintenance once they are established, rain garden plantings need to be weeded and mulched, and dead plants need to be replaced. Keeping the same caretakers from year to year makes maintenance less confusing and easier. They become familiar with the site and plant material, enabling them to distinguish desirable species from weeds.
- DISEASES. Wild bergamot (Monarda fistulosa) and Black-eyed Susan (Rudbeckia hirta) were affected by powdery mildew every season since they were planted. Although powdery mildew only affects plants' cosmetic appearance, looks can be important to property owners and visitors at highly visible commercial sites.
- INVOLVEMENT FROM SITE OWN-**ERS**. Involving the site owners is critical to the success of landscaping. From accepting the idea of installing a rain garden instead of a retention pond, to making sure that the site is well maintained, to promoting environmentally-friendly construction practices among fellow members of the local business community, an engaged site owner is an invaluable asset.

Recently I met with Janelle Riley, coowner of On the Wing Investments, the real estate investment company which operates Fairview Office Park, to discuss the rain garden at this site. Here are some excerpts from our discussion:

Are you happy with the results? I am thrilled with the results. The garden is beautiful. Office park tenants and neighbors regularly walk and bike through the area to view the garden.

What does maintenance involve after five **years?** As the plants have matured, less and less maintenance is necessary. We have not needed to water in the last two years. The only maintenance that is now required is occasional plant replacement and weeding.

Would you recommend rain gardens to other business owners? I would absolutely recommend rain gardens to other business owners. They are beautiful, they increase property sales, and they cost less than traditional methods. What's not to love?

I agree with what Janelle said, "What's not to love" about rain gardens? If designed properly and well maintained, these landscape areas will assist in keeping water resources clean while adding *natural beauty to the surroundings.* 

#### Low Impact Development Symposium

The 2013 International Low Impact Development (LID) Symposium will bring together over 1,000 stormwater researchers and practitioners to share their research, policy and implementation successes years ahead of publication. This is a unique opportunity to accelerate society's ability to apply LID effectively by hosting and international field of stormwater experts at the Saint Paul RiverCentre, August 18-21.

LID is an approach to stormwater management that mimics a site's natural hydrology as the landscape is developed. It is about keeping and managing the raindrop (or snowmelt) where it falls. Using LID approaches, stormwater is managed on-site using native soils and plants. As a result, the rate and volume of predevelopment stormwater running off the landscape is unchanged; LID minimizes or reduces runoff. Less runoff reduces downstream flooding and since runoff often carries pollutants with it, LID improves water quality - ultimately leading to cleaner lakes, rivers, streams, wetlands, and groundwater.

The 2013 Symposium will feature more than 290 presentations, workshops, and tours. Nine half-day short courses and



Rain garden in Roseville, Minnesota. Rain gardens are one of many Low Impact Development (LID) practices that will be featured at the Symposium. Photo by J.Bilotta. 2012.

one all-day short course will be offered on Sunday, August 18. Examples of topics include green roofs, permeable pavement, rainwater harvesting, green highways and streets, and incorporating LID into municipal programs. Four half-day tours will be offered on Wednesday, August 21.

The featured keynotes include:

Low Impact Development: Retooling Communities for the 21st Century Avi Friedman, Ph.D., Professor of Architecture and Director, Affordable Homes Research Group, McGill University, Montreal, Quebec, Canada

Integrating Art Upstream in the Stormwater Design
Buster Simpson, Artist, Seattle,

Washington

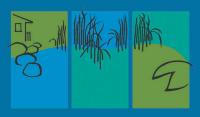
Information regarding the symposium, registration, short courses and tours is available on the Symposium website. www.cce.umn.edu/lids2013.



Rain garden planting in Duluth, Minnesota. Photo by Chris J. Benson.

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## From Shore to Shore

www.shorelandmanagement.org

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From Shore to Shore is available in hard copy and electronic formats. Archived issues are available online at www.shorelandmanagement.org

To subscribe or unsubscribe, please contact Barb LaPlante at bja@umn.edu or 320-589-1711.

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#### SNAPSHOTS: Water Resources Team Programming and Research

There are a variety of educational programs I and research projects the Team delivers to Minnesota communities focused in three areas of work: watershed education, Stormwater U raining, and NEMO (Nonpoint Education for Municipal Officials).

Here is a sampling of recent past and upcoming efforts:

For more information, check the website and calendar of events at www.extension.umn.edu/ water. Visit www1.extension.umn.edu/ environment/water/program-team/ to find contact information for the Water Resources Team educators.

Shoreline Erosion Control Decision Tool – A research project to create an easy web-based tool for the selection of the best, most effective practices to prevent or mitigate shoreline erosion. Release date: later in 2013.

Stormwater Reuse Workshops – A series of three workshops that focus on planning and implementation practices that reuse stormwater on sites for irrigation and other uses. June 5, 11, and 26.

Making Change Happen for the St. Croix **River** – This NEMO workshop on the river is one of the popular and effective ways the WRT advances the knowledge and skills sets of local leaders regarding land use and water resources. July 17.

Community Response to a Changing Landscape and Climate - A NEMO workshop with the City of Victoria to examine needs for stormwater adaptation. June 25 (with more cities in the near future).

Adopting Revised Stormwater Policies to Protect Clean Water and Minimize Impacts – Minnesota Minimal Impact Design Standards (MIDS) Community Assistance Package (CAP) team members are working

with the Minnesota Pollution Control Agency and multiple other partners to audit and revise local ordinances in four pilot communities. Currently those pilot communities are Lindstrom, East Bethel, Chisago, and Center City. Multiple city council and planning commission workshops are scheduled.

Stream Shape and Function - All about Moving Water - Join us for a fun and relaxing day learning about stream shape and function on the banks of the ever-intriguing Yellow Medicine River at Upper Sioux Agency State Park (Granite Falls). We will have a stream simulation model to demonstrate specific processes like sediment movement and erosion. Stay for a second day and learn about prairie ecosystems! Saturday, August 10 and Sunday, August 11.

Improving Water Quality through Effective Stormwater Management: The Connection to Local Land Use Decisions - NEMO workshops with local units of government on multiple dates and in communities including Medina, Minnetonka, Waconia, Sherburne County, and others. northlandnemo.org for additional dates, locations, and information.

Understanding How Watersheds Work: Minnesota Master Naturalist Program – The presentation in Brainerd, Minn., included our award-winning Watershed Game. May 9.

Game Train-the-Trainer Watershed **Program** – See more about the Watershed Game at www.northlandnemo.org/water shedgame.html. Facilitator training in Duluth, Minn., for the new Northland NEMO Watershed Game. July 10.