



**AN ADVANCED STORMWATER BMP TRAINING SERIES: FUNCTION, DESIGN, SELECTION, AND MAINTENANCE**

**ABOUT OUR STORMWATER U TRAINING PROGRAM**

Stormwater U provides training to local stormwater professionals on stormwater best management practices (BMPs) through research based, content specific and hands-on workshops. These opportunities focus on important stormwater issues and requirements facing Minnesota cities and other local governmental units such as watersheds.

Stormwater U workshops are designed to help cities meet their stormwater permit, impaired water goals (TMDL) and other requirements. Stormwater U trainings are designed and developed by a collaborative team including faculty and researchers from the University of Minnesota and partners from the Minnesota Pollution Control Agency, and other State, regional and local agencies.

**Who should attend?**

Excavation contractors, grading contractors, public works staff, engineers, designers, planners, and public officials are invited to attend, discuss, and learn about stormwater BMP management.

**CLASS ATTENDEES:**

- Will receive a participation certificate for completing the series of classes.
- Will have an opportunity to win participation prizes for all classes.

**CLASS 1: AN INTRODUCTION TO STORMWATER BMPS—FUNCTIONS, DESIGNS & INSTALLATIONS**

**Date:** Tuesday, January 24, 2012

**Location:** CWC Land Services Building  
322 Laurel Street, Brainerd, MN 56401

**Time:** 8:00 AM to 3:30 PM

**Cost:** \$40.00

Includes refreshments, lunch, & workshop materials.

**Workshop topics:**

**Part I: Stormwater BMP Introductions:**

- Overview: rules, permits, & History,
- Watershed 101: A Hands on Exercise
- Local Resources
- BMP 101: Functions, Types,
- Creating your own solutions = BMPs
- Gaining confidence in using/applying Stormwater BMPs
- Round Table Discussions

**Part II: BMP Functions, Designs, and Installations:**

- Stormwater BMPs: Functions & Purpose
- Regularity Overview: Design requirements by rules, permits, etc...
- Designing a Stormwater Infiltration BMP
- Hands on Exercise: Designing a BMP
- Soils & Engineered Soils
- Soil Infiltration Rate: why we need it, definition, techniques, measurements, & tools
- Stormwater Infiltration BMP Construction & Installation

**\*\*\* NOTE: All Stormwater training classes may have outdoor field practice exercises. Please come prepared for the weather, rain or shine.**

**CLASS 3: STORMWATER BMP MAINTENANCE**

**Level: Advanced**

**Date:** Tuesday, July 31, 2012

**Location:** Northland Arboretum  
14250 Conservation Drive, Brainerd, MN 56401

**Time:** 8:00 AM to 4:30 PM

**Cost:** \$40.00 - Includes refreshments, lunch, & workshop materials & 2 outdoor exercises: WQ Pond & Raingarden (rain or shine).

**Workshop topics:**

- Regularity Overview: rules, permits, etc...
- What is Maintenance? Restoring the original Function
- Assessment of Stormwater BMPs: Visual Inspection
- On-site Inspections of Water Quality - Pond
- On-site Inspections of Water Quality - Bio Basin
- Field Assessments Results & Prioritization
- Case Study - City of Bloomington Stormwater program - From Inventory to Maintenance
- Available Resources and Emerging Issues

**CLASS 2: STORMWATER DIAGNOSIS & BMP SELECTION**

**Level: Advanced**

**Who should attend?** Public works staff, engineers, designers, planners, and public officials are invited to attend, discuss, and learn about stormwater BMP management.

**Date:** Tuesday, March 27, 2012

**Location:** CWC Land Services Building  
322 Laurel Street, Brainerd, MN 56401

**Time:** 8:00 AM to 3:30 PM

**Cost:** \$40.00

Includes refreshments, lunch, & workshop materials

**Workshop topics:**

- Regularity Overview: rules, permits, etc..
- Site Assessment Concept
- Making the Diagnosis: Understanding the site, Matching BMP Functions & Site's needs
- Site Assessment: How To
- BMP Siting: Optimized BMP Locations, Reading Grading Plan & Finding Best BMP Spots
- Wetlands: are they BMPs?
- Selecting Stormwater BMP/Site Assessment Tools: MIDS, MIDS Calculator, & P8.
- Local Project/Case Study/Site Visit

**For more information on our workshops, visit our website at:**  
[www.extension.umn.edu/stormwater](http://www.extension.umn.edu/stormwater)

**For more information on any courses listed in this brochure, contact Theresa Sowards at (651) 480-7715 or [sowar006@umn.edu](mailto:sowar006@umn.edu).**

## REGISTRATION FORM

For credit card and online registration, go to:  
**extension.umn.edu/stormwaterU**

FOR MAIL-IN REGISTRATION, COMPLETE THIS FORM &  
ENCLOSE A CHECK

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State/ZIP \_\_\_\_\_

Phone (day) \_\_\_\_\_

Email \_\_\_\_\_

### Please register me for:

**Class 1: Stormwater BMP Introduction.....\$40.00**

Tuesday, January 24, 2012 at the Land Services Bldg

**Class 2: Stormwater Diagnosis & BMP Selection.....\$40.00**

Tuesday, March 27, 2012 at the Land Services Bldg

**Class 3: Stormwater BMP Maintenance.....\$40.00**

Tuesday, July 31, 2012 at the Northland Arboretum

**REGISTER FOR ALL THREE WORKSHOPS  
FOR ONLY \$80.00**

### REGISTER ONLINE AT:

[www.extension.umn.edu/stormwater](http://www.extension.umn.edu/stormwater)

### OR MAIL TO:

University of Minnesota Extension, RDU  
405 Coffey Hall - 1420 Eckles Avenue  
St. Paul, MN 55108

Make checks payable to: University of Minnesota

THIS SERIES OF WORKSHOPS WAS  
DEVELOPED WITH PARTICIPATION  
FROM:

- Brock White Construction Materials
- Crow Wing County
- Crow Wing Soil & Water Conservation District
- Minnesota Pollution Control Agency
- Thirty Lakes Watershed District
- University of Minnesota Extension



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Farmington, MN 55024

# Stormwater BMP Training Series

Design, Selection, and Maintenance



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EXTENSION