

# Registration

Storm Water Workshop  
Thursday, April 16, 2015

Name \_\_\_\_\_

Title \_\_\_\_\_

Company/Agency \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

**Fee: \$90.00...includes refreshments, lunch & binder. Add \$10.00 late fee after April 1**  
**NO PURCHASE ORDERS!**

- PDH Certificate requested (see inside)
- Check enclosed payable to: "Waukesha County"

Complete for credit card payment:

Expiration Date \_\_\_\_\_

Credit Card # \_\_\_\_\_

3-digit Security Code (if available) \_\_\_\_\_

Name on Card \_\_\_\_\_

Signature \_\_\_\_\_

Fax to: 262-896-8298 or

Mail to: Waukesha County Land Resources Division  
515 W. Moreland Blvd., Rm # AC260  
Waukesha WI 53188

Questions: call Marcia McCann, Waukesha County 262-896-8302.  
Please advise if you need special accommodations. One week cancellation policy (\$10 admin. fee).

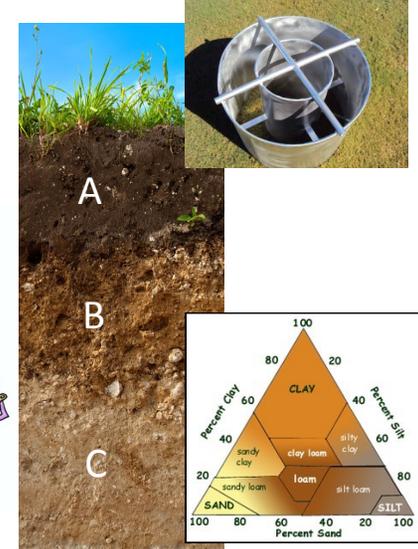
Waukesha County Dept. of Parks & Land Use  
Land Resources Division  
515 W. Moreland Blvd - Rm 260  
Waukesha WI 53188

**Seating is limited.  
Register Early!**

## 2015 Waukesha County Workshop

# Storm Water Workshop

## "The Dirt on Soils"



- ♦ Why soils matter in storm water and erosion control planning
- ♦ How to assess & measure soils
- ♦ How to use soils data in designs

**Thursday, April 16**  
**7:30 am - 4:00 pm**

**Location:** Ruekert & Mielke Bldg.  
W233N2080 Ridgeview Pkwy  
(Hwy F just north of I-94), Pewaukee

## Workshop Description

This 14th annual Waukesha County storm water workshop dives into the importance of soils in storm water and erosion control planning and implementation. Soil experts will describe the process of investigating and documenting soil properties. Storm water experts will describe how to use the soils information for storm water & erosion control BMP planning and implementation, as well as preventing wet basements.

The great facility at Ruekert & Mielke allows for good audience interaction, and plenty of time is reserved to answer audience questions in each session.

## Who Should Attend?

Planners, engineers, municipal staff, consultants and contractors who work with land development, storm water or erosion control issues.

## PDH Certificates

Waukesha County will issue a certificate for eight (8) Professional Development Hours (PDH) for anyone who requests it on their registration and completes the full workshop; but you must complete the full workshop.

## Presenters

Presenter confirmed as of 2/4/2015 include:

Alan Barrows, CST, Waukesha County  
Scott Bordeau, EroTex  
Rodger Bannerman, USGS  
Leif Hauge, P.E., Waukesha County  
Jim Rose, Waukesha County  
Jeff Hammes, CST, Jeffrey Hammes Certified Soil Testing  
Pete Wood, P.E., WDNR  
Brian Pehl, P.E., SEH  
Chris Genellie, P.E., Ruekert-Mielke  
Paul Koszarek, P.E., CST, PSI

# Preliminary Agenda

### 7:30 Registration & Refreshments

#### 8:00 Why Soils Matter in Storm Water & Erosion Control / What can go wrong?

- Storm water BMP planning & design
- Erosion control BMP planning & design
- Preventing wet/flooded basements

#### 8:40 How Soils Should be Assessed

- USDA soil mapping and database
- How to describe soil profiles
- SPS 385 overview (state standard)
- Soil sampling / evaluation methods

### 10:05 Break & Refreshments

#### 10:15 How Soils Should be Assessed (cont.)

- Seasonal high water table indicators
- Credential requirements
- Infiltration rate testing

#### 11:00 RUSLE2 (soil loss equation)

- Background / science behind RUSLE2
- Requirements in state & local codes
- How to use it for erosion planning
- Model inputs - do's and don'ts
- Model outputs - how to change them and reduce the erosion rate
- Timeline for implementation in WI

### 12:00 Lunch (in house)

#### 12:45 How Soils Information Should be Used

- Basement design to prevent wetness - groundwater flow, drainage system design
- Storm water BMP design - wet detention, infiltration, soil amendments, bioretention

### 2:10 Break & Refreshments

#### 2:20 How Soils Info Should be Used (cont.)

- Erosion control BMP design - sediment basins, slope & channel stabilization

#### 2:50 Engineered Soils

- Where they are used
- Design standards for composition
- Water quality treatment & leaching
- Impacts of road salts
- SLAMM modeling

#### 3:50 Case Study Relating to Soils

- BMP design impacts
- Basement / groundwater separation
- Lessons learned

### 4:00 Adjourn

## Workshop Co-sponsors:

- Waukesha County Dept. of Parks & Land Use - Land Resources Division
- Wisconsin Dept. of Natural Resources
- MS4 Community partners in Waukesha County

