

Agenda

Presented by Brad Flack, CPESC, CESSWI, CAS

Selecting Stormwater Best Management Practices

- Site topography, hydrology and soils
- System sizing and design
- System performance
- Selection criteria

Reducing Site Disturbance and Increasing Natural Landscaping

- Benefits of natural landscaping
- Choosing native species for plantings
- Cost considerations and maintenance

Permeable Pavers

- Site criteria and product selection
- Preparation and installation
- Cost considerations and maintenance

Vegetated Roofs

- Benefits and life cycle cost
- Extensive roofs
- Intensive roofs
- Maintenance

Rain Barrels, Cisterns and Rain Gardens

- Stormwater collection
- Water storage
- Reuse
- Garden sizing and design
- Cost considerations

Filter Strips and Drainage Swales

- Benefits and design considerations
- Choosing appropriate vegetation
- Cost considerations and maintenance

Detention Basins and Ponds

- Benefits and site selection
- Sizing and design
- Choosing native vegetation
- Maintenance considerations

Stormwater Best Management Case Studies

Stormwater Best Management Practices
North Little Rock, AR - Friday, November 22, 2019

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Learning Objectives

You'll be able to:

Identify the criteria that need to be considered when selecting stormwater best management practices—criteria that include topography, hydrology, soils, and system size.

Understand the benefits of best practices that reduce site disturbance and increase natural landscaping.

Describe the costs and benefits of stormwater BMPs such as permeable pavers, vegetated roofs, and filter strips.

Describe the costs, benefits and recommended applications for stormwater BMPs such as rain barrels, cisterns, rain gardens and detention basins.



Stormwater Best Management Practices

North Little Rock, AR - Friday, November 22, 2019



Understand criteria for selecting stormwater best management practices

Learn how to reduce site disturbance and increase natural landscaping

Explore uses for rain barrels, filter strips and detention basins

Discuss stormwater best management practices such as permeable pavers and vegetated roofs

Review case studies and discuss maintenance considerations

Continuing Education Credits

Professional Engineers
7.0 PDHs

Architects
7.0 HSW CEHs
7.0 AIA LU|HSW

Landscape Architects
7.0 HSW CEHs
7.0 LA/CES HSW PDHs

Floodplain Managers
7.0 ASFPM CECs



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Brad Flack, CPESC, CESSWI, CAS *President & CEO of Integrity Stormwater*

Mr. Flack has earned his designation, among select thousands in the world, as a certified professional in erosion and sediment control (CPESC) as well as his designation as a certified erosion, sediment and stormwater inspector (CESSWI) and a course instructor, lending his experience and training to his customers for all of their stormwater needs. Furthermore he is among the select few who are Qualified Compliance Inspectors of Stormwater (QCIS). He has served as the president and the administrative vice president of the South Central Chapter of the International Erosion Control Association (IECA). Mr. Flack was the Region 6 president for EnviroCert International and has served as the Region 7 representative for CPESC, Inc. He was technical vice-chair for the CPESC Council, and he is on the Education Committee: Stormwater Management Track for the International Erosion Control Association Region 1 which encompasses North America, South America and Europe, where he has served as chair. Mr. Flack was awarded Young Professional of the Year for 2014 by the IECA Region 1 and is also an IECA Mentor. He also served as a member of the Policies and Procedures Committee and the Certified Professional in Industrial Stormwater Management Committee for EnviroCert International. He is an EnviroMentor for the Texas Commission on Environmental Quality (TCEQ) as well as a member of the TCEQ Houston Area Small Business Advisory Council. Mr. Flack has been involved with stormwater management since 2004, when he learned about permitting, turf establishment, erosion control and detention pond maintenance. He has since continued to learn and develop his stormwater knowledge and skills and is now a speaker at many conferences sharing his expertise across the US and internationally. He is married to his high school sweetheart and they have 3 boys. He works both locally and internationally on humanitarian projects and in missionary service.

Seminar Information

Courtyard Little Rock North
4339 Warden Road
North Little Rock, AR 72116
(501) 753-2000

Tuition

\$289 for individual registration
\$269 for three or more registrations.

Included with your registration: Complimentary continental breakfast and printed seminar manual.

Receive a reduced tuition rate of \$101 by registering to be our on-site coordinator for the day. For availability and job description, please visit www.halfmoonseminars.org.

How to Register

- Visit us online at www.halfmoonseminars.org
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

Cancellations: Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.



Continuing Education Credit Information

This course is open to the public and offers 7.0 PDHs to professional engineers in all states. Courses are not subject to preapproval in Arkansas.

This course also offers 7.0 HSW continuing education hours to architects and landscape architects in most states, including Arkansas. Courses approved by the AIA/CES and the LA/CES are considered approved in Arkansas.

This seminar is approved by the American Institute of Architects Continuing Education System for 7.0 LU|HSW (Sponsor No. J885) and the Landscape Architecture Continuing Education System for 7.0 HSW PDHs. Only full attendance is reportable to the AIA/CES and the LA/CES. Visit www.halfmoonseminars.org for complete AIA/CES information under this course listing.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers, architects and landscape architects.

The Association of State Floodplain Managers has approved this program for 7.0 CECs.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

Additional Learning

Webinar Series

HEC-RAS Webinar Series

- **Hydraulic Principles and Applications**
Tues., October 29, 2019, 11:00 AM - 1:00 PM CDT
- **Working with the HEC-RAS User Interface**
Tues., October 29, 2019, 1:30 - 3:00 PM CDT
- **Water Surface Profiling**
Thurs., October 31, 2019, 11:00 AM - 1:00 PM CDT
- **Steady Flow Surface Profile Demonstrations**
Thurs., October 31, 2019, 1:30 - 3:30 PM CDT

Tree Preservation

- **Concrete and Pavement Design Principles**
Wed., October 30, 2019, 11:00 AM - 12:00 PM CDT
- **Exterior Concrete Pavement Design**
Wed., October 30, 2019, 12:30 - 3:15 PM CDT
- **Interior Concrete Slabs-on-Ground Design**
Thurs., October 31, 2019, 11:00 AM - 1:00 PM CDT
- **Concrete and Pavement Maintenance and Sustainability**
Thurs., October 31, 2019, 1:30 - 3:00 PM CDT

Distributed Batteries for Solar PV Systems

- **Distributed Batteries for Solar PV Systems, Part I**
Wed., November 6, 2019, 11:00 AM - 2:15 PM CST
- **Distributed Batteries for Solar PV Systems, Part II**
Thurs., November 7, 2019, 11:00 AM - 2:15 PM CST

Complying with ADA Standards for Accessible Design

- **Complying with State & Federal Accessibility Requirements**
Thurs., November 7, 2019, 11:00 AM - 1:30 PM CST
- **Applying the 2010 & A117.1 Accessibility Standards**
Fri., November 8, 2019, 11:00 AM - 1:30 PM CST

For more information visit:
www.halfmoonseminars.org/webinars/

Can't Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!
Audio recordings of this seminar are available for purchase starting at \$269. See registration panel for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration

Stormwater Best Management Practices

North Little Rock, AR - Friday, November 22, 2019

How to Register	Registrant Information
Online: www.halfmoonseminars.org	Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____
Phone: 715-835-5900	Additional Registrants: Name: _____ Occupation: _____ Email: _____ Phone: _____
Fax: 715-835-6066	Code: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278	
Complete the entire form. Attach duplicates if necessary.	
Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred.	
() I need special accommodations. Please contact me.	

Tuition

- () **I will be attending the live seminar.** Single Registrant - **\$289.00**. Three or more registrants from the same company registering at the same time - **\$269.00** each.
- () **I am not attending.** Please send me the self-study package:
- ☐ Downloadable MP3 Audio/PDF Manual for **\$269.00**.
☐ CD/Manual Package for **\$289.00**. ☐ USB/Manual Package **\$289.00**.
(S&H included. Please allow five weeks from seminar date for delivery)

Checks: Make payable to HalfMoon Education Inc.

Credit Card: Mastercard, Visa, American Express, or Discover

Credit Card Number: _____
Expiration Date: _____ CVV2 Code: _____
Cardholder Name: _____
Billing Address: _____
City: _____ State: _____ Zip: _____
Signature: _____
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