

# Agenda

Presented by Brad Flack, CPESC, CESSWI, QSM, QCIS, QPSWPPP

## Understanding and Applying the Science of Stormwater

- Hydrology, soil science and drainage
- Identifying consequences of storm events
- Stormwater modeling
- Infiltration and percolation
- Types of pollutants
- Strategies for pollutant reduction and management
- Runoff reduction, routing and storage
- Effect of pollutants in stormwater
- Sources of pollutants

## Understanding National Pollutant Discharge Elimination System (NPDES) Stormwater Requirements

- Regulatory principles
- Stormwater discharges from construction activities
- Stormwater discharges from industrial sources
- Stormwater discharges from municipal sources
- Stormwater discharges from transportation systems
- Stormwater permitting for oil and gas activities
- Limited regulation of agricultural activities
- Permitting procedures
- Designation of impaired waters
- Emerging pollutants and current issues
- Definitions

## Choosing Appropriate Storm Water Best Management Practices (BMPs)

- Stormwater management planning
- Sizing criteria
- Green infrastructure practices
  - Preservation of natural features and conservation design
  - Reducing impervious cover
- Green management techniques
  - Conservation of natural areas
  - Riparian buffers and filter strips
  - Disconnected runoff
  - Rain gardens
  - Stormwater planters
  - Pervious pavement
  - Detention/retention ponds
  - Vegetated swales
  - Stream daylighting
  - Green roofs
  - Rain barrels/cisterns

## Developing Stormwater Pollution Prevention Plans (SWPPP)

- Including required elements
- Assessing building sites
- Choosing best management practices (BMPs)
- Planning for required inspection, maintenance and recordkeeping
- Obtaining plan certification
- Implementing SWPPPs

## Developing Plans for Inspection, Monitoring, Maintenance and Recordkeeping

- Understanding the science and terminology of stormwater management and monitoring
- Implementing monitoring plans
- Reviewing stormwater BMP case studies

## NPDES Stormwater Management Program 2024

Live, Interactive Webinar - Thursday, March 7, 2024

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EAU CLAIRE, WI  
PERMIT NO. 2016

HalfMoon Education Inc.  
PO Box 278  
Altoona, WI 54720-0278



## Learning Objectives

### You'll be able to:

**Explore** the science of stormwater and plan for runoff reduction, routing and storage.

**Review** National Pollutant Discharge Elimination System (NPDES) requirements for handling stormwater discharges.

**Discuss** requirements for discharges from construction activities, industrial sources, municipal sources and transportation systems.

**Choose** appropriate stormwater best management practices.

**Develop** stormwater pollution prevention plans.

**Make** plans for inspection, monitoring and maintenance of stormwater management systems.



# HalfMoon Education Live Webinars NPDES Stormwater Management Program 2024

Live, Interactive Webinar - Thursday, March 7, 2024



**Explore** the science of stormwater

**Discuss** National Pollutant Discharge Elimination System (NPDES) stormwater management requirements

### Continuing Education Credits

**Professional Engineers**  
6.5 PDHs

**Architects**  
6.5 HSW CE Hours  
6.5 AIA LU | HSW

**Choose** appropriate stormwater best management practices

**Develop** stormwater pollution prevention plans

**Monitor** and maintain stormwater infrastructure

**Landscape Architects**  
6.5 HSW CE Hours  
6.5 LA CES HSW PDHs

**International Code Council**  
.65 CEUs (Sitework)

**Floodplain Managers**  
6.5 ASFPM CECs



# Webinar Information

## Log into Webinar

8:30 - 9:00 am CST

## Break

11:45 am - 12:15 pm CST

## Morning Session

9:00 - 11:45 am CST

## Afternoon Session

12:15 - 4:30 pm CST

## Tuition

**\$319** for individual registration.

**\$289** for two or more registrants from the same company at the same time.

**Included with your registration:** PDF seminar manual.

## How to Register

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
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### Can't Attend? Order the Webinar as an On-Demand Package!

Recordings of this webinar are available for purchase. See details online 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.

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# Faculty

## Brad Flack, CPESC, CESSWI, QSM, QCIS, QPSWPPP

*President & CEO of Integrity Stormwater, Spring, TX*

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 three boys. He works both locally and internationally on humanitarian projects and in missionary service.

# Additional Learning

## Restoring Natural Areas in Urban Areas

- Wednesday, February 14, 2024 | 8:30 am - 5:00 pm CST

## Handling Archaeological Issues on Construction Projects

- Thursday, February 15, 2024 | 9:00 am - 12:15 pm CST

## How to Obtain, Interpret, and Change a FEMA Flood Map

- Friday, February 16, 2024 | 12:00 - 3:15 pm CST

## Confronting Both Climate Change and Sea Level Rise: An Action Plan for Our Planet

- Tuesday, February 20, 2024 | 8:30 - 11:50 am CST

- Wednesday, February 21, 2024 | 8:30 - 11:50 am CST

## Culvert Design and Construction

- Tuesday, February 20, 2024 | 9:00 am - 4:30 pm CST

# Credit Information

This webinar is open to the public and is designed to qualify for 6.5 PDHs for professional engineers, 6.5 HSW continuing education hours for licensed architects, and 6.5 HSW continuing education hours for landscape architects in all states that allow this learning method. Please refer to specific state rules to determine eligibility.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700) and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved HalfMoon Education as a sponsor of continuing education (Sponsor No. J885). This course has been submitted for AIA CES approval and is currently pending. Only full participation is reportable to the AIA CES.

The Landscape Architecture Continuing Education System has approved this course for 6.5 HSW PDHs. Only full participation is reportable to the LA CES.

The International Code Council has approved this event for .65 CEUs in the specialty area of Sitework (Preferred Provider No. 1232).

This Association of State Floodplain Managers has approved this course for 6.5 CECs for floodplain managers.

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

## On-Demand Credits

The preceding credit information only applies to the live presentation. This course in an on-demand format may not be eligible for the same credits as the live presentation; please consult your licensing board(s) to ensure that a structured, asynchronous learning format is appropriate. The following pre-approvals may be available for the on-demand format upon request:

6.5 HSW LUs (AIA), 6.5 HSW PDHs (LA CES), 6.5 ASFPM CECs

## Topographic Surveys, Easements and Original vs. Retracement Surveys

- Wednesday, February 21, 2024 | 9:00 am - 4:05 pm CST

## Stream Restoration in the Eastern U.S.

- Wednesday, February 21, 2024 | 7:30 am - 3:30 pm CST

## Deep Dive into Constructed Stormwater Wetlands

- Thursday, February 22, 2024 | 10:00 am - 12:00 pm CST

## Introduction to Surface Spreading Managed Aquifer Recharge

- Friday, February 23, 2024 | 10:00 am - 1:00 pm CST

## Dam Design, Construction, and Maintenance

- Thursday, February 29, 2024 | 9:00 am - 4:30 pm CST

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