

# Agenda

Presented by  
Mr. Scott Southall, RLA, LEED AP BD+C, ASLA, AICP and  
Ms. Denise O'Meara, RLA, LEED AP, ASLA

## Stormwater Management System Objectives and Design Considerations

Regulatory requirements associated with stormwater water quality and quantity

- Clean Water Act
- Federal, state and local requirements

Complying with stormwater regulations

Preparing a stormwater quality management plan (SWQMP)

- Stormwater goals
- Design considerations

## Stormwater Basin/Underground System Design

Site consideration and assessment

Selection criteria

- Site considerations
- Watershed and topographical considerations
- Stormwater contents
- Community and environmental factors

## Choosing Basin Types

Detention basins

- Stormwater routing, sediment handling, outlet
- Pre-treatment
- Maintenance and operations

Retention ponds

- Stormwater routing, sediment handling, soils and vegetation
- Pre-treatment
- Maintenance and operations

Forebay infiltration basins

- Stormwater routing, sediment and chemical handlings, soils and vegetation
- Pre-treatment
- Maintenance and operations

## Choosing an Underground Storage System

Detention/infiltration systems

- Type of storage – chambers, stone, custom design
- Pre-treatment
- Stormwater routing, infiltration, sizing, design criteria

## Sustainable Best Practices in Stormwater Detention/Retention

Green infrastructure practices

Naturalizing detention/retention basins

Small detention areas vs. large detention area

Rain gardens

Underground storage and water reuse options

## Stormwater Basins and Underground Systems

Live, Interactive Webinar - Tues., December 8, 2020



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## Learning Objectives

### You'll be able to:

**Comply** with stormwater regulations and assist with preparation of stormwater management plans.

**Explain** the criteria for designing underground stormwater retention and detention systems.

**Choose** stormwater detention and retention basin types.

**Consider** stormwater routing, sediment handling, soils and vegetation.

**Implement** green infrastructure best practices, including the naturalization of detention/retention basins.



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# HalfMoon Education Online Learning Stormwater Basins and Underground Systems

Live, Interactive Webinar - Tuesday, December 8, 2020



**Understand** stormwater management system objectives and design considerations

**Identify** criteria for choosing an underground storage system

**Choose** detention and retention basin types

**Get tips on** maintenance and operations

**Incorporate** sustainable best practices in stormwater management

## Continuing Education Credits

### Professional Engineers

6.5 PDHs

### Architects

6.5 HSW CE Hours

6.5 AIA LU|HSW

### Landscape Architects

6.5 HSW CE Hours

6.5 LA CES HSW PDHs

### Floodplain Managers

6.5 ASFPM CECS

### International Code Council

.65 CEUs (Sitework)



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# Faculty

## Scott Southall, RLA, LEED AP, BD+C *Principal at Earthcycle Design*

Mr. Southall, RLA, LEED AP BD+C, ASLA, AICP, is a principal with Earthcycle Design, LLC, a landscape architecture, urban planning and community resilience design firm, based in Lexington, Kentucky. He is a professional landscape architect in Kentucky and Ohio, a LEED accredited professional BD+C with the US Green Building Council (USGBC), and a certified planner with the American Planning Association. Mr. Southall has over 25 years of professional experience in planning, design and project management. He has applied his sustainability design experience on a multitude of projects ranging in magnitude and complexity including: urban and site design for institute and community facilities with an emphasis on education and public outreach pertaining to green infrastructure (GI), low impact development (LID) and sustainable sites. Mr. Southall has presented on an assortment of sustainable practices and topics at statewide, regional and national conferences. In 2008, he shared the State of Kentucky Governor’s Award for Environmental Leadership. In 2009, he received an Environmental Commission Award from Lexington-Fayette Urban County Government for his environmental outreach and sustainable design efforts in Lexington. Mr. Southall graduated from the University of Kentucky with a Bachelor of Science in Landscape Architecture. Currently, he serves as one of 12 Sustainable Champions for American Planning Association (APA), serves on the steering committee of Empower Lexington (a climate action plan to reduce CO2), and serves as treasurer for LFUCG’s Environmental Commission. In March 2017, Mr. Southall completed a three-day

Climate Reality Leadership Corps training to become a Climate Reality Leader and served as Mentor in October, 2017. He is a past chapter president and Trustee of Kentucky ASLA, past Board of Directors member for Southeast Stormwater Association (SeSWA), and Market Leadership Advisory Board (MLAB) member for USGBC Kentucky. Mr. Southall is a member of American Society of Landscape Architects and the American Planning Association.

## Denise O’Meara, RLA, LEED AP *Landscape Architect at Earthcycle Design*

Ms. O’Meara, RLA, LEED AP, ASLA, has extensive project experience in a variety of sectors, including general master planning, strategic planning, parks and recreational design for municipal and state government entities, K-12 and post-secondary educational institution and hospital master planning and site design, nature-based learning and play environments, and sustainable stormwater management. She brought the concept of sustainable building and site design through LEED accreditation early on to her firm. As a teacher and mentor, she has sought to give clients and up-and-coming designers a knowledge base and affinity for designing in a manner responsive to natural systems. Ms. O’Meara has a deep understanding that conservation of green space is a requirement for stormwater management, which is made possible through sustainable planning for livability within our population centers. She has written educational and informative articles and guides about the processes of land protection, and she has researched and put into practice those BMPs and conservation tools which benefit sustainability and resiliency.

# Webinar Information

Log into Webinar  
8:30 - 9:00 am CST

Break  
12:45 - 1:15 pm CST

Morning Session  
9:00 am - 12:45 pm CST

Afternoon Session  
1:15 - 4:30 pm CST

## Continuing Education Credit Information

This webinar offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education hours to architects in all states. It offers 6.5 HSW continuing education hours to landscape architects in all states, except Florida, New Jersey, or North Carolina.

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), North Carolina (S-0130), and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York engineers, architects, and landscape 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), §79-1.5(i)(2)). Courses approved by the AIA/CES qualify for Florida and New Jersey architects. Other states do not preapprove continuing education providers or courses.

This course has been approved by the American Institute of Architects Continuing Education System 6.5 LU|HSW (Sponsor No. J885) and the Landscape Architect Continuing Education System for 6.5 HSW PDHs. Only full participation is reportable to the AIA/CES and LA CES.

The Association of State Floodplain Managers has approved this event for 6.5 CECs for certified floodplain managers.

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

Completion certificates will be awarded to participants who complete this event, respond to prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

# Additional Learning

## Introduction to HEC-HMS Modeling

- Mon., Nov. 23, 2020 | 8:30 am - 4:00 pm CST

## Boundaries and Easements

- Wed., December 2, 2020 | 11:00 am - 2:30 pm CST  
- Thurs., December 3, 2020 | 11:00 am - 2:30 pm CST

## Soil Mechanics and Slope Stabilization, Failures and Repairs

- Tues., December 8, 2020 | 10:00 am - 1:45 pm CST  
- Wed., December 9, 2020 | 10:00 am - 2:15 pm CST

## Construction Cost Estimating

- Wed., December 9, 2020 | 8:30 am - 3:50 pm CST

For more information and other online learning opportunities visit: [www.halfmoonseminars.org](http://www.halfmoonseminars.org)

# Registration

## Stormwater Basins and Underground Systems

Live, Interactive Webinar - Tuesday, December 8, 2020

How to Register	
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<b>Complete the entire form.</b> Attach duplicates if necessary.	
<b>Registrant Information</b> Name: _____ Company/Firm: _____ Address: _____ City: _____ State: _____ Zip: _____ Occupation: _____ Email: _____ Phone: _____  <b>Additional Registrants:</b> Name: _____ Occupation: _____ Email: _____ Phone: _____ Name: _____ Occupation: _____ Email: _____ Phone: _____  <small>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.</small> ( )  I need special accommodations. Please contact me.	

Tuition
( ) <b>I will be attending the live webinar.</b> Single Registrant - <b>\$299.00</b> . Three or more registrants from the same company registering at the same time - <b>\$199.00</b> each.
( ) <b>I am not attending.</b> Please send me the webinar recording: <input type="checkbox"/> Streamable MP4 Video/PDF Manual for <b>\$279.00</b> . <input type="checkbox"/> USB Video/PDF Manual for <b>\$279.00</b> .
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