Stormwater Basins and Underground Systems
Charleston, WV - Friday, February 28, 2020

Learning Objectives

You’ll be able to:

Comply with stormwater regulations and work on stormwater quality management plans.

Explain the design criteria for stormwater basins and underground systems, including impact area, watershed and terrain considerations and stormwater content.

Choose stormwater basin types, including detention basins and retention ponds, and choose between underground detention/infiltration systems.

Consider different types of underground stormwater storage, including chambers, stone and custom design.

Identify and describe stormwater best practices, including rain gardens, underground storage and water reuse.

Continuing Education Credits

Professional Engineers
6.5 PDHs

Landscape Architects
6.5 HSW PDHs

Architects
6.5 Continuing Ed. Hours (HSW)
6.5 AIA LU|HSW

Floodplain Managers
6.5 ASFPM CECs

Contractors
Non-Credit Continuing Ed.

Understanding stormwater management system objectives and design considerations

Identify specifics in choosing an underground storage system

Examine detention basins and retention ponds

Learn about the best sustainable practices in stormwater retention/detention

Explore underground system design

Get tips on preparing stormwater quality management plans

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

Identify and describe stormwater best practices, including rain gardens, underground storage and water reuse.

Find us on Facebook
Scott Southall  Principal of Earthcycle Design LLC

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. He has worked on urban and site design for institutions 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 degree in Landscape Architecture. Currently, he serves as one of 12 Sustainable Champions for the American Planning Association (APA), serves on the steering committee of Empower Lexington (a climate action plan to reduce CO2), and serves as treasurer for Lexington-Fayette Urban County Government’s Environmental Commission. In March 2017, Mr. Southall completed a three-day Climate Reality Leadership Corps training in Nashville, Tennessee, and he served as mentor in October 2017. He is a past chapter president and trustee of Kentucky ASLA, a past Board of Directors member for Southeast Stormwater Association (SESWA) and Market Leadership Advisory Board (MLAB) for USGBC. Kentucky. Mr. Southall is a member of American Society of Landscape Architects and the American Planning Association.

Denise O’Meara  Earthcycle Design

Ms. O’Meara has extensive project experience in a variety of industries, including general master planning, strategic planning, parks and recreational design for municipal and state government entities, k-12 and post-secondary educational institutions 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 upcoming 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, that 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 has researched and put into practice those BMPs and conservation tools which benefit sustainability and resiliency.

Seminar Information

Four Points by Sheraton Charleston
600 Kanawha Blvd. East
Charleston, WV 25301
(304) 344-0492

Registration
8:00 - 8:30 am
Morning Session
8:30 am - 12:15 pm
Lunch (on your own) 12:15 - 11:55 pm
Afternoon Session
1:15 - 4:30 pm

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 PDHs to professional engineers, 6.5 HSW PDHs to landscape architects, and 6.5 HSW (Public Protection) continuing education hours to architects in most states, including West Virginia. Educators and courses are not subject to preapproval in West Virginia. The American Institute of Architects Continuing Education System has approved this course for 6.5 LUs/HSW (Sponsor No. J885). Please visit www.halfmooneseminars.org for complete AIA/CES course information under this seminar listing. Only full attendance is reportable to the AIA/CES. The Landscape Architecture Continuing Education System has approved this course for 6.5 HSW PDHs. Only full attendance can be reported to the LA/CES.

This seminar offers a non-credit continuing education opportunity for non-registered contractors. It has not been reviewed by any state contractor licensing entity for continuing education purposes.

Attention 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.

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:

$289.00

CD/Manual Package for individual registration

$269.00

USB/Manual Package

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