

Agenda

Presented by Chris Maxwell-Gaines

Understanding Stormwater Permit Requirements and Procedures

- Background and development of national and state regulations and permit requirements
- Activities exempt from construction general stormwater permit requirements
- Complying with NPDES and Texas Commission on Environmental Quality regulations
 - Notice of intent requirements
 - Special conditions for sensitive waters
 - Review and permitting process
 - Implementing, monitoring and assessing SWPPPs

Understanding and Applying the Science of Stormwater

- Hydrology, soil science and drainage
- Classifying storm events
- Identifying consequences of storm events
- Stormwater modeling

Developing Stormwater Pollution Prevention Plans (SWPPPs)

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

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
 - Vegetated swales
 - Stream daylighting
 - Green roofs
 - Rain barrels/cisterns
 - Proprietary practices
- Disconnected runoff
- Rain gardens
- Stormwater planters
- Porous pavement

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

Stormwater Management with Green Infrastructure
Austin, TX - Thursday, May 24, 2018



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PO Box 278
Altoona, WI 54720-0278

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Learning Objectives

You'll be able to:

Determine when a stormwater permit is necessary and comply with stormwater permit requirements.

Describe the elements to be included in stormwater pollution prevention plans (SWPPPs).

Obtain plan certifications for SWPPPs.

Choose appropriate stormwater best management practices (BMPs) and develop plans for inspection, monitoring, maintenance and recordkeeping.

Utilize green infrastructure practices and green management techniques to reduce stormwater runoff.



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Understand the background and development of national and state stormwater rules and permit requirements

Identify activities exempt from construction general stormwater permit requirements

Examine the required elements and best practices for stormwater pollution prevention plans

Evaluate green stormwater infrastructure, including porous pavement, cisterns and rain gardens

Learn about the science of stormwater management and monitoring

Continuing Education Credits

Professional Engineers
7.5 PDHs

Floodplain Managers
7.5 ASFPM CECs

Architects & Landscape Architects
7.5 HSW CEPs/CE Hours
7.5 AIA HSW Learning Units
7.5 LA CES HSW PDHs

Contractors
Non-Credit Continuing Ed.



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Faculty

Chris Maxwell-Gaines *PE at Innovative Water Solutions, LLC*

After college, Mr. Maxwell-Gaines and his wife joined the U.S. Peace Corps and accepted volunteer positions in Suriname, South America. They were assigned to the remote village of Godolo which is located in the Amazon rainforest, deep in the interior of Suriname. They helped the village implement a water well project, provided after-school tutoring, and provided business training for the villagers. They spent 27 months serving in the Peace Corps. After returning to Austin, Mr. Maxwell-Gaines worked at a civil engineering firm that provided a breadth of project experience ranging from TMDL computer modeling projects for impaired streams in Texas, to subdivision design, and water and wastewater treatment plant design. He became a licensed engineer in 2007. In 2004, he started Innovative Water Solutions LLC. IWS is a design/build water conservation company that focuses on the nexus of stormwater management and water conservation. The company designs and installs rainwater/stormwater collection systems, stormwater management systems including green infrastructure, and graywater reuse systems, as well as efficient irrigation systems and water conservative landscaping for residential and commercial projects. To date, Innovative Water Solutions has installed over 6,500,000 gallons of rainwater storage capacity across the state of Texas. Mr. Maxwell-Gaines has designed rainwater harvesting systems for numerous municipalities and institutions including Texas A&M University; the University of Texas at Austin; the City of Austin; Austin, Hayes Consolidated, and Wimberley Independent School Districts (Texas); Atmos Energy; Denton County (Texas); the City of New Braunfels, San Jacinto River Authority; Sea World; the Texas Department of Transportation; and Texas Parks and Wildlife.

Seminar Information

Hilton Garden Inn Downtown

500 North Interstate 35
Austin, TX 78701
(512) 480-8181

Tuition

\$279 for individual registration
\$259 for three or more registrations.

Each registration includes a 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 CD/manual package. You may also send another person to take your place.

Can't Attend? Order the CD/Manual Package:
An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Continuing Education Credit Information

This seminar is open to the public. It offers 7.5 PDHs to professional engineers in all states. Educators and courses are not subject to preapproval in Texas.

This course offers 7.5 HSW CEPHS to Texas architects and landscape architects. The American Institute of Architects has approved this course for 7.5 HSW Learning Units, and the Landscape Architecture Continuing Education System has approved it for 7.5 HSW PDHs. Only full attendance can be reported to the AIA/CES and LA/CES. Educators and courses are not subject to preapproval in Texas.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Louisiana, Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York architects and landscape architects.

The Association of State Floodplain Managers has approved this event for 7.5 CECs. ASFPM approval qualifies this program for Texas floodplain managers.

This course offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any state contractor licensing entity.

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

The Distributed Battery Webinar Series

- **The Distributed Battery Webinar, Part I**
Wed., April 4, 2018, 11:00 AM - 2:15 PM CDT
- **The Distributed Battery Webinar, Part II**
Thurs., April 5, 2018, 11:00 AM - 2:15 PM CDT

AutoCAD 2018 Beginners 2-D Course

- **Create a Drawing**
Thurs., April 5, 2018, 11:00 AM - 12:30 PM CDT
- **Edit a Drawing**
Thurs., April 5, 2018, 1:00 - 2:30 PM CDT
- **View and Display a Drawing**
Fri., April 6, 2018, 11:00 AM - 12:30 PM CDT
- **Print, Plot or Print File**
Fri., April 6, 2018, 1:00 PM - 2:30 PM CDT

Special Inspections

- **Overview of Special Inspections**
Wed., April 11, 2018, 11:00 AM - 12:30 PM CDT
- **Steel, Wood and Cold-Formed Steel**
Wed., April 11, 2018, 1:00 - 2:30 PM CDT
- **Concrete, Masonry and Soils**
Thurs., April 12, 2018, 11:00 AM - 1:00 PM CDT
- **Fire-Resistant Materials and Material Standards**
Thurs., April 12, 2018, 1:30 PM - 2:30 PM CDT

Shallow Foundations

- **Evaluating Building Sites**
Thurs., April 19, 2018, 11:00 AM - 12:30 PM CDT
- **Shallow Foundation Design**
Thurs., April 19, 2018, 1:00 - 2:30 PM CDT
- **Special Considerations in Foundation Design and Construction**
Fri., April 20, 2018, 11:00 AM - 1:00 PM CDT
- **Soil Improvement and Foundation Diagnosis and Repair**
Friday, April 20, 2018, 1:00 - 2:30 PM CDT

Erosion and Sediment Control

- **Basics of Site Stormwater Regulations and Requirements**
Wed., April 25, 2018, 11:00 AM - 12:00 PM CDT
- **Structural and Non-Structural Erosion and Sediment Control Best Practices**
Wed., April 25, 2018, 12:30 PM - 2:30 CDT
- **Site Planning**
Thurs., April 26, 2018, 11:00 AM - 1:00 PM CDT
- **Long-term Post Construction Management Practices**
Friday, April 20, 2018, 12:30 PM - 2:30 CDT

For more information and other online learning opportunities visit:
www.halfmoonseminars.org/webinars/

Registration

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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: _____
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Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		Name: _____ Occupation: _____ Email: _____ Phone: _____
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 - \$279.00 . Three or more registrants from the same company registering at the same time - \$259.00 each.
() I am not attending. Please send me the CD manual package for \$289.00 . (S&H included. Please allow five weeks from seminar date for delivery)
Checks: Make payable to HalfMoon Education Inc.
Credit Card: <i>Mastercard, Visa, American Express, or Discover</i>
Credit Card Number: _____
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Billing Address: _____
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