

Agenda

Understanding Stormwater Permit Requirements and Procedures *E. Wong*

- Background and development of national and state regulations and permit requirements
- Activities exempt from construction general stormwater permit requirements
- Complying with NPDES and Colorado Department of Health and Environment 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 *D. Fisher*

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

Developing Stormwater Pollution Prevention Plans (SWPPP) *M. Nuno*

- 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) *M. Nuno*

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

Developing Plans for Inspection, Monitoring, Maintenance and Recordkeeping *M. Nuno*

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

Stormwater Management 2018

Denver, CO - Wednesday, August 22, 2018



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

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Learning Objectives

You'll be able to:

Learn how to comply with NPDES and Colorado Department of Health and Environment regulations.

Understand hydrology, soil science and drainage.

Discuss how to obtain stormwater pollution prevention plan certification.

Preserve natural features onsite and use green management techniques.

Review best management practices including vegetated swales, rain gardens, and porous pavement.

Develop plans for system inspection, monitoring and maintenance.



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Understand stormwater permit requirements and procedures

Identify consequences of storm events

Examine Stormwater Pollution Prevention Plans (SWPPPs)

Learn about stormwater Best Management Practices (BMPs)

Explore green infrastructure practices

Discuss plans for inspection, monitoring, maintenance and records keeping

Continuing Education Credits

Architects

- 7.5 HSW CEHs
- 7.5 AIA HSW Learning Units

Landscape Architects

- 7.5 LA CES HSW PDHs

Professional Engineers

- 7.5 PDHs

Floodplain Managers

- 7.5 ASFPM CECs

Contractors

- Non-Credit CE



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Eliot Wong *Owner and Principal of Advanced Water Resources Engineering, LLC (AWARE)*
Mr. Wong is the owner and principal of Advanced Water Resources Engineering, LLC (AWARE), a water resources engineering firm that provides consultation relative to permit compliance, drainage, flood control, stormwater design, floodplain management, and H&H, as well as expert testimony for drainage and flooding litigation matters. Mr. Wong is a licensed professional engineer in Colorado with 15 years of consulting experience and has worked on stormwater projects in Colorado, Kansas, Missouri, South Dakota, Texas, Illinois, and New York, as well as in Peru. He has worked on nearly 40 litigation matters, of which many had a major component relative to stormwater permitting and compliance. His first introduction to stormwater permitting was in the early 2000s as intern at the Urban Drainage and Flood Control District when he was asked to draft an outline for a newly required construction management document called a “Stormwater Management Plan.” Since then, much of Mr. Wong’s work has been directly related to stormwater management and its evolution in Front Range Colorado and across the nation.

Deborah A. Fisher, P.E., CFM, CPESC
Water Resources Engineer at WATER ENGINEERING SOLUTIONS LLC
Ms. Fisher has over 30 years of experience in hydrology and hydraulics, having designed hundreds of drainage and water quality treatment facilities all along the front range of Colorado. She has also authored hundreds of drainage studies, and is well versed in low impact development, groundwater investigation, and emergency flood mitigation. She was the continuing education director for Martin/Martin for over ten years, and conducted several hundred classes for the civil department. Ms. Fisher’s current passion is helping people and solving problems, particularly for homeowners, to understand water migration and control, both on the surface and underground. She has performed dozens of site visits and water issue evaluations for conditions such as standing water, wet basements, excessive sump pump discharges, or other drainage issues.

Manuel “Manny” Nuño, P.E., LEED AP, CPESC, QSD/QSP
Associate Principal with DCI Engineers, Denver, CO
Mr. Nuño is an associate principal at the Denver office of DCI Engineers, and he leads the civil engineering division in Colorado. A 2008 graduate of the University of Notre Dame with a specialty in structural and environmental engineering, he has established himself as a leader in the field of erosion and sediment control. In his 10 year career, Mr. Nuño has excelled in the design of land development projects including grading, utility design, storm water management, and erosion control. Through his experiences as a consulting engineer, he has prepared erosion and sediment control plans for such clients as Marriott International, San Diego Gas & Electric (SDG&E), Stonebridge Companies, and Kiewit Infrastructure West. In the field, Mr. Nuño has provided stormwater inspection services for SDG&E, CaesarsEntertainment Group, and public agencies such as the City of Carlsbad, California. He prides himself on working with developers, architects, and contractors to bridge the gap between regulatory compliance and constructability in the field. Mr. Nuño is a registered professional engineer in Colorado and California, a certified professional in erosion and sediment control, LEED accredited professional, and a qualified SWPPP developer/practitioner. He is an active member in the American Society of Civil Engineers, the Urban Land Institute, and the Colorado Association of Stormwater and Floodplain Managers.

Seminar Information

Holiday Inn Denver Cherry Creek
455 South Colorado Blvd.
Denver, CO 80246
(303) 388-5561

Tuition
\$279 for individual registration
\$259 for three or more registrations.
Each registration includes a complimentary continental breakfast and printed seminar manual.

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.

Continuing Education Credit Information

This seminar is open to the public and offers 7.5 HSW continuing education hours to architects and landscape architects and 7.5 PDHs to professional engineers in most states, including Colorado architects.

This seminar is approved by the American Institute of Architects for 7.5 HSW Learning Units (Sponsor No. J885) and the Landscape Architecture Continuing Education System for 7.5 HSW PDHs. Only full attendance can be reported to the AIA/CES and LA/CES.

Colorado architects, engineers and landscape architects with continuing education requirements in other states will be able to apply the hours earned at this seminar, in most cases. Refer to specific state rules to determine eligibility.

The Association of State Floodplain Managers has approved this activity for 7.5 CECs.

This event also offers a continuing education opportunity to construction contractors, but it has not been submitted to any state contractor licensing entity for continuing education approval.

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**
- Septic Systems Series**
- **Onsite Wastewater Treatment Technologies, Regulations and Contaminant Removal**
Thurs., July 19, 2018, 11:00 AM - 12:30 PM CDT
 - **Evaluating Sites, Setting Treatment Goals and System Design**
Thurs., July 19, 2018, 1:00 - 2:30 PM CDT
 - **Alternative and Sustainable Treatment Technologies**
Fri., July 20, 2018, 11:00 AM - 12:30 PM CDT
 - **Management Programs for Onsite Wastewater Treatment Systems**
Fri., July 20, 2018, 1:00 - 2:30 PM CDT

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

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.

Registration

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How to Register		Registrant Information
Online: www.halfmoonseminars.org		Name: _____
Phone: 715-835-5900		Company/Firm: _____
Fax: 715-835-6066		Address: _____
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		City: _____ State: _____ Zip _____
Complete the entire form. Attach duplicates if necessary.		Occupation: _____
		Email: _____
		Phone: _____
		Additional Registrants:
		Name: _____
		Occupation: _____
		Email: _____
		Phone: _____
		Name: _____
		Occupation: _____
		Email: _____
		Phone: _____
		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: *Mastercard, Visa, American Express, or Discover*

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