

Agenda

Understanding Environmental Permit Requirements and Procedures that Affect Stormwater

Background and development of national and state regulations and permit requirements
NEPA permitting requirements and application to stormwater
Water quality certifications and stream buffer variances
When permitting applies and general exemptions

Understanding and Applying the Soil Science of Stormwater

Hydrology and how soils affect stormwater runoff

Soil science and testing

- Pre-project geotechnical investigation
- Infiltration and percolation testing
- Soil mixes for stormwater BMPs
- Field installation of infiltration materials
- During and post-construction testing of infiltration materials

Choosing Appropriate Stormwater Best Management Practices (BMPs)

Stormwater management planning

- The need for stormwater management
- Sizing criteria
- Runoff reduction
- Stormwater modeling
- Green infrastructure practices
- Preservation of natural features and conservation design
- Reducing impervious cover
- Conservation of natural areas
- Riparian buffers

Stormwater BMPs

- Bioretention areas
- Bioslopes
- Detention basins/stormwater ponds
- Underground storage
- Stormwater wetlands
- Enhanced swales
- Grass channels
- Green roofs
- Permeable pavers /porous pavement
- Sand filters
- Rainwater harvesting/planters/tree boxes
- Proprietary devices

Complying with NPDES Stormwater Permitting Requirements

NPDES stormwater permitting

- Industrial General Permit
- MS4 Permits

Complying with NPDES and the Georgia EPD regulations

- Notice of intent requirements
- What the permit covers and does not cover
- Application for coverage
- General requirements and standard conditions
- Implementing, monitoring and assessing NPDES criteria

Preparing stormwater reports and SWPPPs

Planning for required inspection, maintenance and recordkeeping

Stormwater BMP Case Studies

Site development projects

Transportation projects

Stormwater Management 2019 Atlanta, GA - Friday, June 21, 2019

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Learning Objectives

You'll be able to:

Discuss when stormwater permitting applies and **explore** general exemptions.

Examine how soils affect stormwater runoff.

Gain tips on choosing appropriate stormwater BMPs, including bioretention areas, detention basins, green roofs and sand filters.

Prepare stormwater reports and stormwater pollution prevention plans (SWPPPs).

Review stormwater BMP case studies, including site development projects.



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Understand environmental permit requirements and procedures that affect stormwater

Apply soil science to stormwater management

Choose appropriate stormwater best management practices (BMPs)

Review stormwater BMP case studies

Continuing Education Credits

Professional Engineers

7.0 PDHs

Architects

7.0 PDUs (Public Protection)

7.0 AIA HSW Learning Units

Landscape Architects

7.0 HSW Continuing Ed. Hours

7.0 LA CES HSW PDHs

Floodplain Managers

7.0 ASFPM CECs

Contractors

Non-Credit Continuing Ed.



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Faculty

Jennifer Aulick Etheridge, P.E. *Owner Aulick Engineering, Atlanta, GA*
Ms. Etheridge has over 16 years of experience and specializes in stormwater management and erosion control design for transportation and site projects. She provides design services such as stormwater master plans, stormwater management, SWPPPs, bridge hydraulic studies, and roadway drainage and erosion control plans in accordance with NPDES requirements. Ms. Etheridge worked for a transportation consulting firm for nine years before starting her own business in 2011. She is Level II certified for erosion control in the State of Georgia. Ms. Etheridge has experience in following the design requirements set forth in the *Georgia Stormwater Management Manual*, the *GDOT MS4 Permit and Drainage Manual* and the *Manual for Sediment and Erosion Control* in Georgia.

David Skurky, P.E. *Aulick Engineering, Atlanta, GA*
Mr. Skurky has 15 years of technical and project management experience in site design with his main focus in stormwater management in the metropolitan Atlanta area. He specializes in all aspects of stormwater including drainage reports, hydraulic and hydrology analyses, floodplain modeling, detention pond design, water quality BMP design, erosion and sediment control and construction inspection. Mr. Skurky graduated from University of Virginia in 2002 with a B.S. degree in Civil Engineering. He is Level II erosion control certified design professional in Georgia and a certified floodplain manager (CFM).

Bailie Clark, E.I.T. *Aulick Engineering, Atlanta, GA*
Ms. Clark has 3 years’ experience in the civil engineering field. She graduated from The University of Alabama with a bachelor of science degree in Civil Engineering in 2016. Ms. Clark specializes in roadway drainage and BMP design, stormwater management/MS4 compliance and NPDES industrial stormwater compliance. Prior to joining Aulick Engineering in 2016, she completed a three-term co-op in the Environmental Engineering department of the Mercedes-Benz

Seminar Information

Hyatt House/Cobb Galleria
3595 Cumberland Blvd. SE
Atlanta, GA 30339
(770) 541-2960

Tuition
\$289 for individual registration
\$269 for three or more registrants from the same company at the same time.

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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.

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- 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 self-study package. You may also send another person to take your place.

manufacturing facility in Vance, Alabama. Ms. Clark’s responsibilities in this position included, but were not limited to, industrial stormwater permit compliance, RCRA compliance, “zero-waste-to-landfill” status retention and employee education.

Marc Johnston, P.E. *NOVA, Athens, GA*
Mr. Johnston has been providing geotechnical and construction materials testing services in the Georgia market since 1992. His key strengths are in the evaluation of foundation systems for buildings and bridges and in the evaluation of subgrade for pavements and slabs-on-grade. Mr. Johnson’s field experience encompasses conventional soil, concrete and asphalt testing techniques, as well as extensive evaluation and monitoring of various foundation systems including drilled piers, auger-cast piles, driven piles, rammed aggregate piers, micro-piles and conventional shallow foundations. He has provided and managed construction materials testing and special inspection services for an extensive variety of projects ranging in magnitude from \$1 million to over \$300 million in total construction costs.

David Smith *Environmental Consultant, Ecological Solutions Inc., Georgia*
Mr. Smith is a senior ecologist with expertise in erosion and sediment control, wetland delineation and permitting, threatened/endangered species management and NEPA/GEPA document production. He is a certified professional in erosion and sediment control (CPESC #2408) through the International Erosion Control Association. His experience includes the preparation and coordination of numerous stream buffer variance applications on residential, commercial, industrial, and transportation projects. Ecological Solutions, Inc. provides environmental consulting to both public and private sector clients and is committed to offering diligent, knowledgeable services that result in solutions to environmental concerns and regulatory permitting issues.

Continuing Education Credit Information

This seminar is open to the public and offers 7.0 PDHs to professional engineers, 7.0 Public Protection PDUs to architects, and 7.0 HSW continuing education hours to landscape architects in Georgia. Educators and courses are not subject to preapproval in Georgia.

This seminar is approved by the American Institute of Architects for 7.0 HSW Learning Units (Provider No. J885) and the Landscape Architecture Continuing Education System for 7.0 HSW PDHs. Only full attendance can be reported to the AIA/CES and LA/CES.

Engineers, architects, and landscape architects seeking continuing education credit 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.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), 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 course for 7.0 CECs.

This seminar also offers a non-credit continuing education opportunity to contractors. It has not been reviewed 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.

Can’t Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!
An audio recording of this seminar is available for \$289. Allow four 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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Complete the entire form. Attach duplicates if necessary.		() I need special accommodations. Please contact me.

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: ☐ Downloadable MP3 Audio/PDF Manual for \$269.00 . ☐ CD/Manual Package for \$289.00 . (S&H included. Please allow five weeks from seminar date for delivery)
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