Agenda

Presented by Daryl Norris

Understanding Stormwater Permit Requirements and Procedures

Background and development of national and state regulations and permit requirements:
- Federal Clean Water Act and North Carolina state stormwater regulations

Activities exempt from construction general stormwater permit requirements

Complying with NPDES and North Carolina Department of Environmental Quality requirements
- Notice of intent requirements
- What the permit covers and does not cover
- Application process
- General requirements and standard conditions
- Implementing, monitoring and assessing stormwater pollution prevention plans (SWPPPs)

Understanding and Applying the Science of Stormwater

Hydrology, soil science and drainage
Identifying consequences of storm events
Stormwater modeling
Runoff reduction, routing and storage
Infiltration and percolation

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
- Disconnected runoff
- Rain gardens
- Stormwater planters
- Pervious pavement
- Detention/retention ponds
- Vegetated swales
- Stream daylighting
- Green roofs
- Rain barrels/cisterns

Developing Stormwater Pollution Prevention Plans (SWPPP)

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

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

North Carolina Stormwater Management 2024
Live, Interactive Webinar - Monday, May 13, 2024

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Learning Objectives

You'll be able to:

Comply with NPDES and North Carolina Department of Environmental Quality regulations for stormwater management.

Discuss the consequences of storm events and learn about stormwater modeling.

Understand the science of stormwater infiltration and percolation.

Use green infrastructure practices to decrease stormwater runoff.

Use green management techniques including riparian buffers, filter strips, vegetated swales, rain gardens and pervious pavement.

Review the required elements in stormwater pollution prevention plans.

Plan for required inspection and maintenance of stormwater infrastructure.

HalfMoon Education Inc.,
Your LIVE Education Leader Presents

North Carolina Stormwater Management 2024

Live, Interactive Webinar - Monday, May 13, 2024

Learn about stormwater permit requirements and procedures

Explore hydrology, soil science and drainage

Study stormwater best management practices (BMPs)

Discuss developing stormwater pollution prevention plans (SWPPP)

Examine developing plans for inspection, monitoring, maintenance and recordkeeping

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7.0 PDHs

Architects
7.0 HSW CE Hours
7.0 AIA LU|HSW

Landscape Architects
7.0 HSW CE Hours
7.0 LA CES PDHs|HSW

International Code Council
.7 CEUs (Sitework)

Floodplain Managers
7.0 ASFPM CECs

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Online - Monday, May 13, 2024

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Break
11:45 am - 12:45 pm EDT

Morning Session
8:30 - 11:45 am EDT

Afternoon Session
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Faculty

Daryl Norris
Civil Engineer, City of Greenville, NC
Mr. Norris is a civil engineer for the City of Greenville, North Carolina, specializing in stormwater engineering, and he is the owner of Norris Environmental Engineering, PLLC. He is a professional engineer, a certified floodplain manager, a certified professional in stormwater quality, and a certified professional in low impact development. Prior to working for the City of Greenville, Mr. Norris worked with the North Carolina Wildlife Resources Commission and the North Carolina Division of Water Quality. He was also the environmental specialist and floodplain administrator for the City of Wilson. He holds a bachelor's degree in Fish and Wildlife Management and a master's degree in Biological and Agricultural Engineering, both from North Carolina State University.

Credit Information

This webinar is open to the public and is designed to qualify for 7.0 PDHs for professional engineers, 7.0 HSW continuing education hours for licensed architects, and 7.0 HSW continuing education hours for landscape architects in North Carolina.

HalfMoon Education is an approved continuing education sponsor for engineers in North Carolina (S-0130).

The American Institute of Architects Continuing Education System has approved this course for 7.0 HSW LUs (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved this course for 7.0 HSW PDHs. Only full participation is reportable to the LA CES.

The International Code Council has approved this event for .7 CEUs in the specialty area of Sitework (Preferred Provider No. 1232).

This Association of State Floodplain Managers has approved this course for 7.0 CECs for floodplain managers.

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

On-Demand Credits
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7.0 HSW LUs (AIA) 7.0 HSW PDHs (LA CES) 7.0 ASFPM CECs

Additional Learning

Deep Dive into Water Quality Tests
- Monday, April 22, 2024 | 9:30 - 11:30 am EDT

The National Environmental Policy Act (NEPA) Review Process
- Monday, April 22, 2024 | 10:00 am - 5:00 pm EDT

Controlling Shoreline Erosion and Creating Living Shorelines on Lakes and Rivers
- Thursday, April 25, 2024 | 9:30 am - 4:30 pm EDT

Land Descriptions
- Thursday, April 25, 2024 | 10:00 am - 1:00 pm EDT

Pavement Design, Construction and Maintenance
- Thursday, April 25, 2024 | 9:30 am - 5:00 pm EDT

Calculating Embodied and Operational Carbon Footprints for Buildings
- Friday, April 26, 2024 | 2:00 - 5:00 pm EDT

Complying with NPDES Industrial Stormwater Requirements
- Friday, April 26, 2024 | 9:30 am - 4:30 pm EDT

Reinforced Concrete Building Design and Construction
- Friday, April 26, 2024 | 9:30 am - 5:30 pm EDT

Structural Design Loads under the ASCE 7-22 Standard
- Friday, April 26, 2024 | 10:00 am - 5:30 pm EDT

Working with the IECC's 2021 Climate Zone Maps
- Friday, April 26, 2024 | 10:30 am - 1:30 pm EDT

Soil Mechanics, Bearing Capacity and Slope Stabilizations
- Thursday, May 2, 2024 | 9:30 am - 5:30 pm EDT

Introduction to HEC-HMS Modeling
- Friday, May 3, 2024 | 10:00 am - 5:30 pm EDT

Retrofitting Houses Toward the Passive House Standard
- Friday, May 3, 2024 | 10:00 am - 5:00 pm EDT

Engineering Projects from Start to Finish
- Monday, May 6, 2024 | 9:30 am - 5:30 pm EDT

Urban Bikeway Design and Construction
- Tuesday, May 7, 2024 | 10:00 am - 1:15 pm EDT
- Tuesday May 14, 2024 | 10:00 am - 1:15 pm EDT

FEMA Floodplain Letters of Map Change Explained
- Wednesday, May 8, 2024 | 10:00 am - 2:30 pm EDT

Handling Ethical Issues in Construction Contracting
- Wednesday, May 8, 2024 | 10:00 am - 11:00 am EDT

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