

Credit Information

Wetland Restoration

This webinar is open to the public and offers 6.5 PDHs to professional engineers in all states, 6.5 HSW continuing education hours to architects in all states, 6.5 HSW continuing education hours landscape architects licensed in all states except New Jersey.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700) and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers, architects and landscape architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2), §69.6(i)(2) and §79-1.5(i) (2)). LA CES approval qualifies this course for landscape architects licensed in Florida and North Carolina. HalfMoon Education is not seeking approval for landscape architects in New Jersey. Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 6.5 LU|HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved this course for 6.5 HSW PDHs. Only full participation is reportable to LA CES.

This webinar has been approved by the Association of State Floodplain Managers for 6.5 CECs for floodplain managers.

HalfMoon Education is an approved CM Provider with the American Planning Association. This course is registered for CM | 6.5 for Certified Planners.

Completion certificates will be awarded to participants who complete this event, respond to prompts and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Retaining Wall Design and Slope Stabilization Techniques

This webinar is open to the public and offers 6.0 PDHs to professional engineers in all states, 6.0 HSW continuing education hours to architects in all states, and 6.0 HSW continuing education hours to landscape architects in all states except New Jersey.

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The American Institute of Architects Continuing Education System has approved this course for 6.0 LU|HSW (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved this course for 6.0 HSW PDHs. Only full participation is reportable to the LA CES.

The International Code Council has approved this event for .60 CEUs in the specialty area of Sitework (Preferred Provider No. 1232).

This webinar has been approved by the Association of State Floodplain Managers for 6.0 CECs for floodplain managers.

Completion certificates will be awarded to participants who complete this event, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

Live, Interactive Webinars

- Wetland Restoration
- Retaining Wall Design and Slope Stabilization Techniques

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PO Box 278
Altoona, WI 54720-0278



Live, Interactive Webinars

Wetland Restoration

- Friday, April 29, 2022 | 8:30 am - 4:00 pm CDT

Retaining Wall Design and Slope Stabilization Techniques

- Thursday, May 5, 2022 | 11:00 am - 2:15 pm CDT

- Friday, May 6, 2022 | 11:00 am - 2:15 pm CDT

To register, view detailed presenter biographies, and see other learning opportunities, please visit:

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HalfMoon Education Live Webinars



Wetland Restoration

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AIA: 6.5 LU|HSW Landscape Architects: 6.5 HSW CE Hours
LA CES: 6.5 HSW PDHs Floodplain Managers: 6.5 ASFPM CECs
Certified Planners: CM | 6.5



Retaining Wall Design and Slope Stabilization Techniques

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International Code Council: .6 CEUs (Sitework)



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HalfMoon Education Inc.
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Wetland Restoration

Friday, April 29, 2022 | 8:30 am - 4:00 pm CDT (incl. a 30-min break)

Tuition: \$319 per registrant, \$289 per registrant for two or more

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Certified Planners: CM | 6.5

Agenda

Wetlands Science

- Defining wetlands and identifying different types
 - Wetland soils and vegetation
 - Wetland hydrology
- Environmental services provided by wetlands

Wetlands History in the United States: Systematic Destruction and Degradation

- The historic view of wetlands: wastelands
- Wetland elimination in service of agriculture and development
- Turning the corner: the Clean Water Act of 1972
- National Food Security Act of 1985
- State wetlands initiatives

Purposes and Benefits of Wetland Restoration

- What it means to restore a wetland
- Restoration versus conservation or management
- Goals of wetland restorations
- Assessing viability of goals and beginning a restoration plan

Planning a Wetland Restoration

- Complying with federal, state, and local regulations
- Obtaining permits
- Getting assistance from government agencies and non-government groups
- Developing a site plan

Implementing a Restoration Plan

- Creating a timetable
- Design bid vs. design build
- Finding the right contractor
- Considering vegetation and wildlife
- Monitoring and maintenance plans

Wading in: Wetland Restoration Case Studies

- Discussing case studies of restored wetlands for lessons learned
- Reviewing case studies of degraded wetlands (provided by students)
- Evaluating restoration potential

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Can't Attend? Order the Webinar as a Self-Study Package!

Recordings of these webinars are available for purchase. Visit these course listings on our website for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

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Retaining Wall Design and Slope Stabilization Techniques

Thursday, May 5, 2022 | 11:00 am - 2:15 pm CDT (incl. a 15-min break)

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Agenda Day One

Introduction to Soil Mechanics

An overview of soil mechanics

Retaining Walls – Stability and Types

- Loads and Forces
 - Lateral earth pressure
 - Water pressure
 - Surcharge and traffic loading
 - Seismic loading
- External Stability of retaining walls
 - Sliding
 - Overturning
 - Bearing capacity
 - Global stability
 - Settlement

LRFD vs ASD

- Types of stability of retaining walls
 - Conventional gravity walls
 - Segmental retaining walls
 - MSE
 - Cellular confinement wall
 - Gabions
 - Cantilevered walls
 - Sheet pile wall
- Selection of wall type

Internal Stability of Retaining Walls

- Cantilevered retaining walls
- MSE walls
- Cellar confinement walls

Agenda Day One

Slope Stability and Stabilization

- Slope stability analysis
- Evaluation of slope failures
- Stabilization techniques and monitoring
 - Unloading
 - Drainage
 - Buttressing
 - Reinforcement
 - Monitoring methods and criteria

Biotechnical Slope Stabilization

- Introduction
- Principles of biotechnical stabilization
- Case studies

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Added Value: Enhance your learning - a recording of this webinar will be available for attendees to stream online for two weeks after the program date. (live webinar attendance required to receive credit)

Faculty

Wetland Restoration

Dr. Michael Liptak is a senior ecologist at EnviroScience, Inc, where he specializes in wetland ecology, wetland restoration, and mitigation wetland design. Dr. Liptak earned a B.S. degree in Biology at the University of Toledo and a Ph.D. degree in Environmental Science at The Ohio State University under the noted wetland ecologist Dr. William Mitsch. He has over 25 years of experience in wetlands research and consulting and is a Certified Senior Ecologist (Ecological Society of America). His primary responsibilities at EnviroScience Inc. include wetland mitigation planning, wetland assessments and delineations, technical report preparation, and permitting. Dr. Liptak is a member of the Society of Wetlands Scientists and the Ecological Society of America, and he regularly gives seminars on wetland issues and regulations within Ohio.

Retaining Wall Design and Slope Stabilization Techniques

Ibraheem Shunnar, P.E. *Director of Engineering at The Mannik & Smith Group*

Mr. Shunnar has more than 25 years of experience in geotechnical engineering with expertise in specialty foundations, ground improvement, slope stability, instrumentation and waste management. He has a master's degree in Geotechnical Engineering from the University of Michigan, and he is a registered professional engineer. He is the author of many articles and papers on geotechnical engineering. He was the project manager for the Fairlane Green redevelopment project, winner of the 2008 National Phoenix Award. He is also the recipient of the distinguished achievement award from the University of Michigan.

Additional Learning

Practical Site Engineering

- Fri, Apr 1, 2022 | 8:30 am - 4:30 pm CDT

Parking Structure Design, Construction, and Maintenance

- Mon, Apr 4, 2022 | 8:00 am - 3:30 pm CDT

Floodplain Modeling, Mapping and Regulation

- Tues, Apr 5, 2022 | 10:00 am - 2:00 pm CDT
- Wed, Apr 6, 2022 | 10:00 am - 2:00 pm CDT

The Arborist Short Course: Advanced Tree Knowledge for Better Tree Care

- Fri, Apr 8, 2022 | 9:00 am - 4:30 pm CDT

International Building Code 2021

- Tues, Apr 12, 2022 | 8:00 am - 4:00 pm CDT

Designing for Fire Protection

- Tues, Apr 19, 2022 | 9:00 am - 4:00 pm CDT

Structural Forensic Engineering

- Tues, Apr 19, 2022 | 9:00 am - 3:50 pm CDT

Boundaries and Easements

- Wed, Apr 20, 2022 | 11:00 am - 2:15 pm CDT
- Thurs, Apr 21, 2022 | 11:00 am - 2:15 pm CDT

Low Impact Development

- Wed, Apr 20, 2022 | 10:00 am - 2:00 pm CDT
- Thurs, Apr 21, 2022 | 10:00 am - 12:45 pm CDT

Managing Construction with AIA Document A201: General Conditions

- Thurs, Apr 21, 2022 | 9:00 am - 4:30 pm CDT

Colorado River Management: Science, Law and Policy

- Mon, Apr 25, 2022 | 7:30 am - 2:30 pm CDT

Onsite Wastewater Treatment Systems: Innovations, Commercial and Cluster Systems

- Mon, Apr 25, 2022 | 8:30 am - 4:00 pm CDT

Shoreline Protection - Lakes, Ponds and Other Inland Waters

- Tues, Apr 26, 2022 | 8:30 am - 4:30 pm CDT

IBC Significant Changes: Administration and Building Planning

- Fri, Apr 29, 2022 | 11:00 - 3:30 pm CDT

Reading, Interpreting and Writing Land Descriptions Workshop

- Fri, Apr 29, 2022 | 9:00 am - 4:00 pm CDT

HVAC Primer for Design Professionals

- Tues, May 3, 2022 | 8:30 am - 4:30 pm CDT

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