Agenda

Presented by Peter Hanrahan

Lakes and Shoreline Development

Historical development of our lakeshores

Shifting to an ecologically sound planning approach

Building resilient shorelines

Regulatory Compliance

Federal requirements State-by-state regulations

Permitting Approval Standards and specifications Enforcement

Common Site Challenges

Shoreline erosion

Drainage improvements and slope stabilization

Stormwater management Site specific conditions Human activities

Plants and Living Shorelines

Root stabilization Vegetated buffers
Plant selection Using native plants

Eliminating invasive species

Living Shoreline Toolbox - Lakes and Ponds

Vegetated buffers Coir fiber mats and rolls

Fascines Living crib walls

Live staking Soil lifts

Toe protection Turf reinforcement Gabions Erosion control blankets

Living Shoreline Toolbox - Rivers and Streams

Rock vanes Cross vanes
Root wads/rocks/logs Lunkers
Fascines, living cribwalls Soil lifts

Case Studies and Lessons Learned

Group Discussion/Questions and Answers/Looking Ahead

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

Recordings of this webinar are available for purchase. See course listing online 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.

Tuesday, April 26, 2022

Lakes,

Protection

Shoreline

Other

and

Ponds

Live, Interactive

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



Learning Objectives

You'll be able to:

Learn from problems created by the historical development of our lakes and rivers.

Comply with federal environmental laws and state regulations.

Address common shoreline challenges, such as stormwater management and erosion control.

Discuss the role of plants in creating living shorelines.

Learn innovative techniques for shoreline protection, including fascines, soil lifts, cross vanes, and fiber mats.

Use case studies to evaluate the success or failure of shoreline management practices.



HalfMoon Education Live Webinars

Shoreline Protection -Lakes, Ponds and Other Inland Waters

Live, Interactive Webinar - Tuesday, April 26, 2022



Take an ecologically sound planning approach to shoreline management

Comply with state and federal regulations

Manage stormwater and control erosion

Plan living shorelines for lakes, ponds rivers and streams

Use innovative techniques, including vegetated buffers, gabions, living crib walls and rock vanes

Continuing Education Credits

Professional Engineers 7.0 PDHs

Architects

7.0 HSW CE Hours 7.0 LU|HSW **Landscape Architects** 7.0 HSW CE Hours

7.0 HSW PDHs

Floodplain Managers 7.0 ASFPM CECs

Certified Planners CM | 7.0







Faculty

Peter Hanrahan is a certified professional in erosion and sediment control, and has more than 43 years of industry experience. In addition to presentations in Canada, Taiwan and the Dominican Republic, Peter has also presented at the national level for many organizations, including the International Erosion Control Association, Land Improvement Contractors of America, the Geotechnical Fabrics Institute, the National Working Waterfront Network, and the American Water Works Association.

His articles have been published in many magazines, including Erosion Control, Land & Water, Geosynthetics, and Landscape Architect & Specifier News.

He has produced webinars for the International Erosion Control Association, the International Association of Hydroseeding Professionals, the New York State Society of Professional Engineers, and Forester University.

He has also served as a guest lecturer at the University of Mississippi, Ohio Northern University, University of New England, and Vermont Technical College.

Peter has also been active in industry organizations. He was national president of the International Management Council in 1991-92, and he also served four terms as president of the Northeast Chapter of the International Erosion Control Association. He is also a member of the Senior Advisory Committee of Envirocert.

Peter has developed and delivered training events throughout his career. From 2008 to the present, he has organized coastal erosion control training events up and down the New England Coast, with multiple seminars in Maine, New Hampshire, Massachusetts, Rhode Island and Connecticut. Event co-sponsors for these events have included the Maine Department of Environmental Protection, Maine Sea Grant, the Rhode Island Coastal Management Council, the University of Rhode Island Coastal Resources Center, Connecticut College and Connecticut Sea Grant.

He has also assisted with the development of erosion control standards with the Illinois Tollway Authority, and the State Departments of Transportation in New Hampshire, Vermont, Maine, Oklahoma, Missouri, Arkansas and Illinois.

Additional Learning —

Stormwater Best Management Practices

- Fri, March 25, 2022 | 8:30 am - 5:00 pm CDT

HEC-RAS Unsteady/2D Modeling

- Mon, March 28, 2022 | 8:30 am - 5:00 pm CST

Examining Common Construction Defects and Failures

- Thurs, March 31, 2022 | 10:00 am - 12:00 pm CDT

Floodplain Modeling, **Mapping and Regulation**

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

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

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

Boundaries and Easements

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

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

Webinar Information

Log into Webinar Break 8:00 - 8:30 am CDT

12:45 - 1:15 pm CDT

Morning Session

Afternoon Session

8:30 am - 12:45 pm CDT 1:15 - 4:30 pm CDT

Tuition

\$319 for individual registration

\$289 for two or more registrants from the same company at the same time.

Included with your registration: PDF 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

Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar. For more information, please visit our FAQ section of our website, or visit www.gotowebinar.com.

Cancellations: Cancel at least 48 hours before the start of the webinar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another webinar or the self-study package. You may also authorize another person to take your place.

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Recordings of this webinar are available for purchase. See registration panel 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.

Continuing Education Credit Information

This webinar offers 7.0 PDHs to professional engineers in all states, 7.0 HSW continuing education hours to architects in all states, and 7.0 HSW continuing education hours to landscape architects 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)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved HalfMoon Education as a sponsor of continuing education (Sponsor No. 1885). This course is approved for 7.0 LU | HSW. Only full participation is reportable to the AIA CES.

HalfMoon Education is an approved provider with the Landscape Architecture Continuing Education System. This course is approved for 7.0 HSW PDHs. Only full participation is reportable to the LA CES.

This webinar has been approved by the Association of State Floodplain Managers for 7.0 CECs for floodplain managers.

HalfMoon Education is an approved CM Provider with the American Planning Association. This course is registered for CM | 7.0 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).

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)

Registration

Shoreline Protection - Lakes, Ponds and Other Inland Waters

Live, Interactive Webinar - Tuesday, April 26, 2022

How to Register		Registrant Information
Online: www.halfmoonseminars.org		Name: Company/Firm: Address:
Phone: 715-835-5900		City:State:Zip Occupation: Email:
Fax: 715-835-6066	Code:	Phone: Additional Registrants: Name:
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278 Complete the entire form. Attach duplicates if necessary.		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.
		() Fneed special accommodations. Please contact me.

	. Single Registrant - \$319.00 . Two or more egistering at the same time - \$289.00 each.		
() I am not attending. Please send me Streamable MP4 Video/PDF Manu USB Video/PDF Manual for \$329.0	ual for \$329.00 .		
Checks: Make payable to HalfMoon Edu	cation lnc.		
Credit Card: Mastercard, Visa, American Express, or Discover			
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