

Agenda

Presented by Brian Kwiatkowski and Craig Straub

The Behavior of Surface Water

- Flow measurement
- Historical records
- H&H modeling methods
- Understanding human impacts
- Causes of river degradation

Introduction to Geomorphology

- Fluvial geomorphology 101
- The 4 dimensions (section, planform, profile, time)
- Channel evolution
- Stream hydraulics
- Stream ecology

Tools for Assessment and Restoration

- Rapid watershed assessment methods
- Prescribed treatments
- In-stream structures (profile)
- Streambank stabilization (section)
- Planform reconstruction (planform)
- Buffer revegetation
- Watershed management
- Project examples

Design Considerations

- Plans and specifications
- Stakeout and structure tables
- Submittals and deliverables
- Project stop points
- Site preparation
- Erosion and sediment control
- Managing invasive vegetation
- Successful riparian restoration

Lessons Learned: Construction Considerations

Stream Restoration for Design Professionals

Columbus, OH - Thursday, June 6, 2019



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

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Learning Objectives

You'll be able to:

Identify the causes of river degradation.

Learn about channel evolution, stream hydraulics and stream ecology.

Evaluate assessment and restoration tools for in-stream structures, streambank stabilization and planform reconstruction.

Manage invasive vegetation, and control erosion and sedimentation.

Discuss lessons learned from stream restoration case studies.



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Study the behavior of surface water **Evaluate** design considerations

Receive an introduction to geomorphology

Consider lessons learned from stream restoration case studies

Explore tools for stream assessment and restoration

Continuing Education Credits

Professional Engineers

6.5 CPD Hours/PDHs

Floodplain Managers

6.5 ASFPD CECs

Landscape Architects

6.5 HSW Contact Hours
6.5 LA CES HSW PDHs

Construction Contractors

Non-Credit Continuing Ed.



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Brian J. Kwiatkowski *Applied Ecological Services*

Mr. Kwiatkowski is a certified professional ecologist (CE) and fluvial geomorphologist, with nearly 20 years of experience in the fields of watershed planning, green infrastructure design, and ecosystem restoration. Mr. Kwiatkowski has extensive training in the analysis and design of riverine systems, including Newbury Hydraulics and Rosgen Level IV Natural Channel Design certification. He is responsible for developing watershed management plans, river and stream restoration projects, and sustainable stormwater systems. He has collected and analyzed data on more than 400 miles of open channel throughout North America, including geomorphic and vegetative process indicators, habitat evaluation, and sediment transport data. Mr. Kwiatkowski has also contributed to stormwater best management practice (BMP) manuals addressing the design of open channels, design of storm drainage facilities, green infrastructure planning, and water quality improvement. He has provided design, inspection and construction management services for numerous projects throughout the United States.

Craig A. Straub *Civil and Environmental Consultants, Inc.*

Dr. Straub has over 20 years of experience in sustainable stormwater management systems, aquatic and terrestrial ecosystem reconstruction, endangered species and wetland science. He has managed complex projects related to watershed restoration and has developed green and grey design stormwater solutions. He has led projects related to watershed assessment, including GIS and mapping, hydraulic and hydrologic modeling, watershed ecology, source area identification, pollutant loading analysis, and evaluation of watershed management strategies and best management practices (BMPs). Dr. Straub has also conducted several wetland delineations and stream evaluations along with wetland and stream mitigation design and has obtained Section 404 and 401 permits for various clients, negotiating the complexities of the permitting processes. With an extensive background in preparing planting plans and technical specifications in support of wetland and stream restoration he has developed comprehensive land-use plans involving the return of remediated sites to their natural historic conditions and has designed and implemented ecological restoration plans, including monitoring and maintenance, for wetlands, prairies, riparian and upland forests and streams. Dr. Straub has also conducted bioengineering workshops along with bioengineering design and implementation for stream restoration sites.

Seminar Information

Crowne Plaza Columbus North - Worthington

6500 Doubletree Avenue
Columbus, OH 43229
(614) 885-1885

Registration
8:00 - 8:30 am
Morning Session
8:30 - 11:45 am
Lunch (On your own)
11:45 am - 12:45 pm
Afternoon Session
12:45 - 4:30 pm

Tuition

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

Included with your registration: *Complimentary continental breakfast and printed seminar manual.*

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.

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

Continuing Education Credit Information

This live lecture presentation is open to the public and offers 6.5 continuing professional development hours/PDHs to professional engineers in all states and 6.5 HSW contact hours to Ohio landscape architects. Educators and courses are not subject to preapproval in Ohio.

This seminar is approved by the Landscape Architecture Continuing Education System for 6.5 HSW PDHs. Only full attendance can be reported to the AIA/CES and LA/CES.

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 activity for 6.5 CECs.

This course offers a continuing education opportunity to construction contractors. It has not been approved by any state contractor licensing board.

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

Passive House: Planning and Design

- **Energy Efficiency of Conventional Construction**
Thurs., May 9, 2019, 11:00 AM - 12:00 PM CDT
- **Passive House Standard: Purpose, Principles and Development**
Thurs., May 9, 2019, 12:30 - 2:00 PM CDT
- **Architectural Elements of Passive Houses**
Fri., May 10, 2019, 11:00 AM - 12:30 PM CDT
- **Mechanical Systems in Passive Houses**
Fri., May 10, 2019, 1:00 - 2:30 PM CDT

Erosion and Sediment Control

- **Soils and Causes of Erosion**
Thurs., May 16, 2019, 11:00 AM - 12:00 PM CDT
- **Goals for Selection of Erosion and Sediment Control Practices**
Thurs., May 16, 2019, 12:30 - 1:30 PM CDT
- **Calculations for Determining Soil Loss and Channel Stabilization**
Fri., May 17, 2019, 11:00 AM - 12:00 PM CDT
- **Non-Structural Erosion and Sediment Control Best Practices**
Fri., May 17, 2019, 12:30 - 1:30 PM CDT

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

Can't Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!

Audio recordings of this seminar are available for purchase starting at \$269. 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..

Registration

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

Checks: Make payable to HalfMoon Education Inc.

Credit Card: *Mastercard, Visa, American Express, or Discover*

Credit Card Number: _____

Expiration Date: _____ CVV2 Code: _____

Cardholder Name: _____

Billing Address: _____

City: _____ State: _____ Zip: _____

Signature: _____

Email: _____

