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.

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

Study the behavior of surface water
Receive an introduction to geomorphology
Explore tools for stream assessment and restoration

Evaluate design considerations
Consider lessons learned from stream restoration case studies

Continuing Education Credits

Professional Engineers
6.5 CPD Hours/PDHs

Floodplain Managers
6.5 ASFPM CECs

Landscape Architects
6.5 HSW Contact Hours
6.5 LA CES HSW PDHs

Construction Contractors
Non-Credit Continuing Ed.
Brian J. Kwiatkowski  
Applied Ecological Services

Mr. Kwiatkowski is a certified professional ecologist (CE) and fluvial geomorphologist, with nearly 20 years of experience on 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.

Brian J. Kwiatkowski  
(614) 885-1885
Columbus, OH 43229
Worthington

Crown Plaza Columbus North - Worthington
6500 Doubletree Avenue
Columbus, OH 43229
(614) 885-1885

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

Did you receive a reduced tuition rate of $107? By registering to be on 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 $59 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 5.5 HSWS 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 HSWS PDHs. Only full attendance can be reported to the LAIA/CES and LA/ACES.

HalfMoon Education is approved an continuing education sponsor for engineers in Florida, Iowa (License No. CE00000510), Nebraska (Approval No. 24GRD00000700), 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 CEUs.

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.

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 restoration, and ecosystem management. He has managed complex projects related to watershed restoration and has developed and designed stormwater treatment systems. 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 development 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 developed bioengineering workshops along with bioengineering design and implementation for stream restoration sites.

Dr. Straub has over 20 years of experience in sustainable stormwater management systems, aquatic and terrestrial ecosystem restoration, and ecosystem management. He has managed complex projects related to watershed restoration and has developed and designed stormwater treatment systems. 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 development 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.

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 - 12:00 PM CDT
• Mechanical Systems in Passive Houses
Fri., May 10, 2019, 10:00 - 12:00 PM CDT

Erosion and Sediment Control
• Soils and Causes of Erosion
Thurs., May 9, 2019, 11:00 AM - 12:00 PM CDT
• Goals for Selection of Erosion and Sediment Control Practices
Thurs., May 9, 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

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. Please 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.

© 2019 HEI #19 OHSTRMRS 6 6 CBUS TC