

Agenda

Introduction

C. Menconi, E. D'Oro

Impacts of human activities on the natural world

- Impervious surfaces
- Pollution
- Streams as stormwater disposal

Remedies we'll discuss

- Erosion/sediment control regulations and practices
- Low impact development
- Stream stabilization and restoration

Erosion/Sediment Control

C. Menconi

Impacts from sediment

Regulations: federal, state NPDES permits

- Activities/projects subject to permits
- Permit requirements
- Best management practices to comply

Low Impact Development

C. Menconi

Need for changes in urban stormwater management

- "Low impact development- what's that?"; comments by a rural resident
- Historic changes in urban landscape, impacts on stormwater management
- Goals of LID
- LID features
- Construction BMPs to make LID work

Stream Stabilization and Restoration

E. D'Oro

How do streambanks become "unstable"?

Impacts of degradation to human/natural environment

- Habitat
- Flooding

Restoration

- Habitat restoration
- Goals: restoration to what?

Bank stabilization techniques

- Materials
- Design considerations
- Geomorphic conditions
- Stream dynamics

Stream project planning/execution

- HPA, other permits

Construction considerations

- Access and isolation
- Minimize impacts to fish, other organisms
- Work sequence

Summary

C. Menconi, E. D'Oro

Human infrastructure and activities impact the natural world

Stormwater regulations on construction and application of best management practices maintain water quality

Low impact development restores natural stormwater management functions within dense human infrastructure

Stabilization and restoration of streams can reverse past damage and improve stream habitat and water quality

Low Impact Development, Stream Stabilization and Erosion Control

Seattle, WA - Wednesday, October 31, 2018



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

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Learning Objectives

You'll be able to:

Explore the impact of construction and development on the natural world.

Examine the goals of low impact development and review LID features.

Control erosion and sedimentation by complying with stormwater management regulations.

Learn about the importance of stream stabilization and restoration.

Use best management practices to maintain water quality, preserve natural areas and restore habitat.



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Understand the impacts of human activities on the natural world

Identify the need for changes in urban stormwater management

Examine stream stabilization and restoration

Learn about federal and state regulations

Explore stream project planning and execution

Discuss construction considerations

Continuing Education Credits

Professional Engineers

6.5 PDHs

Architects & Landscape Architects

6.5 HSW PDHs
6.5 AIA HSW Learning Units
6.5 LA/CES HSW PDHs

Floodplain Managers

6.5 ASFPD CECS

Contractors

Non-Credit Continuing Ed.



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Faculty

Carl Menconi CPESC, CESSWI
Project Consultant with Environmental Project Consulting LLC

Mr. Menconi has more than 30 years experience in environmental restoration, consulting, and training, and he has designed and taught courses in erosion and sediment control and other environmental topics. He is a Washington certified erosion and sediment control lead (CESCL) and has surveyed streams and constructed in-stream habitat projects, specializing in placing logs and boulders with hand equipment. Mr. Menconi has also supervised and directed hand crews on stream restoration, trail construction, other environmental restoration projects.

Evan D’Oro, PE
Project Engineer with Natural Systems Design

Mr. D’Oro joined NSD to pursue his passion for the outdoors and for preserving our water resources and their fish and wildlife habitats. After working with the NRCS since 2013 on engineering design, site survey and construction management for agricultural conservation projects in the Chesapeake Bay watershed, Mr. D’Oro joined NSD in 2015 to assist the NSD team with the design of restoration projects throughout the Northwest. He has a B.S. degree in Environmental Engineering from the Pennsylvania State University and is a registered professional engineer in Washington State. In his free time you’ll find him skiing in the north Cascades or fly-fishing the Yakima and other Washington rivers.

Seminar Information

Best Western Plus Executive Inn 200 Taylor Avenue N. Seattle, WA 98109 (206) 448-9444	Registration 8:00 - 8:30 am	Lunch (On your own) 12:15 - 1:15 pm
	Morning Session 8:30 am - 12:15 pm	Afternoon Session 1:15 - 4:30 pm

Tuition
\$279 for individual registration
\$259 for three or more simultaneous registrations.
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 (CDT), 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 CD/manual package. You may also send another person to take your place.

Additional Learning

Webinar Series
Off-grid Photovoltaic Master Class
• **Off-grid Photovoltaic Master Class, Part I**
Wed., Oct. 3, 2018, 11:00 AM - 2:15 PM CDT
• **Off-grid Photovoltaic Master Class, Part II**
Thurs., Oct. 4, 2018, 11:00 AM - 2:15 PM CDT

Stormwater Management Systems
• **Basics of Stormwater Regulations and Requirements, Including New EPA Regulations**
Thurs., Oct. 4, 2018, 11:00 AM - 12:00 PM CDT
• **Working with the Regulator**
Thurs., Oct. 4, 2018, 12:30 - 2:00 PM CDT
• **Site Planning and Choosing Best Management Practices**
Fri., Oct. 5, 2018, 11:00 AM - 12:00 PM CDT
• **Long-term Stormwater Management Practices**
Fri., Oct. 5, 2018, 12:30 - 2:00 PM CDT

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

Floodplain Mapping and Regulation
• **Floods, Floodplains and Introduction to Floodplain Management**
Wed., Oct. 10, 2018, 11:00 AM - 12:30 PM CDT
• **Flood Maps and Flood Zones**
Wed., Oct. 10, 2018, 1:00 - 2:30 PM CDT
• **Elevations in the National Flood Insurance Program (NFIP) and Floodplain Regulation**
Thurs., Oct. 11, 2018, 11:00 AM - 12:30 PM CDT
• **Practical Floodplain Management**
Thurs., Oct. 11, 2018, 1:00 - 2:30 PM CDT

HEC-RAS Webinar Series
• **Hydraulic Principles and Applications**
Thurs., Oct. 18, 2018, 11:00 AM - 1:00 PM CDT
• **Working with the HEC-RAS User Interface**
Thurs., Oct. 18, 2018, 1:30 - 3:00 PM CDT
• **Water Surface Profiling**
Fri., Oct. 19, 2018, 11:00 AM - 1:00 PM CDT
• **Steady Flow Surface Profile Demonstrations**
Fri., Oct. 19, 2018, 1:30 - 3:30 PM CDT

Continuing Education Credit Information

This seminar is open to the public and offers a 6.5 continuing education opportunity to Washington professional engineers (not required for license renewal), which will qualify for 6.5 PDHs in other states. This course also offers 6.5 HSW PDHs to Washington architects and landscape architects. Educators and courses are not subject to preapproval in Washington.

This seminar is approved by the American Institute of Architects for 6.5 HSW Learning Units (Sponsor No. J885) and the Landscape Architecture Continuing Education System for 6.5 HSW PDHs. Only full attendance can be reported to AIA/CES and LA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey (Approval No. 24GP00000700), North Carolina, and North Dakota.

This course offers a non-credit continuing education opportunity to construction contractors. It has not been approved by any state contractor board with mandatory continuing education.

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.

Can’t Attend? Order the CD/Manual Package:
An audio recording of this seminar is available for \$289 (including shipping). Allow five weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

Registration

Low Impact Development, Stream Stabilization and Erosion Control
Seattle, WA - Wednesday, October 31, 2018

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: _____
Fax: 715-835-6066		Name: _____ Occupation: _____ Email: _____ Phone: _____
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		Name: _____ Occupation: _____ Email: _____ Phone: _____
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 - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.
() **I am not attending.** Please send me the 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.
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