

Agenda

Presented by Kristofor L. Kvarfordt

Understanding Infiltration

- Stormwater behavior before regulatory requirements
- Utah stormwater management requirements
- Benefits of infiltrating stormwater
 - Reduced stormwater volume and peak flow
 - Improved stormwater quality

Soil and Water Science

- Types of soils
- Soil characteristics
- Impact of water on soils
- Movement of water through soils

Infiltrating Stormwater

- Defining infiltration
- Measuring infiltration
- Creating and using infiltration surfaces

Tips on Maximizing Infiltration

- Getting buy-in from contractors
- Acceptable wetness of soils and surfaces
- Effects of construction equipment

Improving Infiltration with Low Impact Development Techniques

- Bio-retention cells (rain gardens)
- Pervious pavement
- Vegetated filter strips
- Stormwater retention and reuse
- Wetlands

Stormwater Infiltration Case Studies

Effective Stormwater Infiltration

Salt Lake City, UT - Tuesday, June 26, 2018

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PO Box 278
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Learning Objectives

You'll be able to:

- Review** soil characteristics and explore the impact of water on soils.
- Understand** the benefits of infiltrating stormwater.
- Create** and use infiltration surfaces.
- Work** with contractors to maximize infiltration.
- Improve** infiltration with low impact development techniques, including pervious pavement and rain gardens.



Effective Stormwater Infiltration

Salt Lake City, UT - Tuesday, June 26, 2018



Understand infiltration

Identify Utah stormwater management requirements

Examine soil and water science

Learn about improving infiltration with low impact development techniques

Explore stormwater infiltration case studies

Discuss tips to maximize infiltration

Continuing Education Credits

Professional Engineers

6.5 Professional Ed. Hours/PDHs

Architects

6.5 HSW Continuing Ed. Hours

6.5 AIA HSW Learning Units

Landscape Architects

6.5 HSW Contact Hours

6.5 LA/CES HSW PDHs

Floodplain Managers

6.5 ASFPM CECs



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Faculty

Kristofor L. Kvarfordt *Principal at Cache Landmark Engineering Inc.*

Mr. Kvarfordt is principal and the senior landscape architect/land planner at Cache Landmark Engineering, Inc. located in Logan, Utah. During his 13-year career, he has worked on a broad range of projects throughout Utah, Idaho, Nevada, and California. His experience includes large scale planning, trail and open space master planning, campus master planning and detailed site development planning for commercial and institutional projects. He has had direct responsibility for management and construction observation for several green infrastructure and low impact development projects throughout Cache County and on the Utah State University campus. Mr. Kvarfordt works closely with civil engineers and other project specialists to create plans that are well integrated into all the various components of a project. His expertise is on developing site solutions that meet the needs of the user, while integrating innovative stormwater collection, water sensitivity, treatment and re-use solutions. Mr. Kvarfordt also serves as an adjunct instructor in the Department of Landscape Architecture and Environmental Planning at Utah State University. He is a licensed landscape architect in Utah, Idaho and Wyoming. Mr. Kvarfordt received his Bachelor of Landscape Architecture and Master of Landscape Architecture degrees from Utah State University.

Seminar Information

Marriott University Park 480 Wakara Way Salt Lake City, UT 84108 (801) 581-1000	Registration 8:00 - 8:30 am Morning Session 8:30 am - 12:15 pm	Lunch (On your own) 12:15 - 1:15 pm Afternoon Session 1:15 - 4:30 pm
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Tuition

\$279 for individual registration
\$259 for three or more simultaneous registrations.
Each registration includes a 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 a job description, go online to 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 CD/manual package. You may also send another person to take your place.

Additional Learning

Webinar Series

- National Electrical Code: Onsite Power Generation and Distribution**
- **National Electric Code: Onsite Power Generation and Distribution Part 1**
Weds., June 6, 2018, 11:00 AM - 2:15 PM CDT
 - **National Electric Code: Onsite Power Generation and Distribution Part 2**
Thurs., June 7, 2018, 11:00 AM - 2:15 PM CDT

HVAC Series

- **Heating, Ventilation and Air Conditioning Principles**
Thurs., June 7, 2018, 11:00 AM - 1:00 PM CDT
- **HVAC System Design Considerations**
Thurs., June 7, 2018, 1:30 - 2:30 PM CDT
- **Evaluating HVAC Systems and Equipment**
Fri., June 8, 2018, 11:00 AM - 12:00 PM CDT
- **HVAC System Controls and Techniques**
Fri., June 8, 2018, 12:30 - 2:30 PM CDT

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

Continuing Education Credit Information

This seminar is open to the public and offers 6.5 professional education hours/PDHs to professional engineers and 6.5 HSW continuing education hours to architects in all states, except Florida architects. It also offers Utah landscape architects 6.5 HSW contact hours. Educators and courses are not subject to preapproval in Utah.

This seminar is approved by the American Institute of Architects for 6.5 HSW Learning Units (Sponsor No. J885) and 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, Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York architects.

The Association of State Floodplain Managers has approved this activity for 6.5 CECs

Attendance will be monitored and reported, as required. 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.

Introduction to Vibrations

- **Introduction to Vibrations**
Thurs., June 14, 2018, 11:00 AM - 1:00 PM CDT
- **Eigenvalues, Eigenvectors and Motion**
Thurs., June 14, 2018, 1:30 - 3:00 PM CDT
- **Analysis and Test Methods**
Fri., June 15, 2018, 11:00 AM - 12:30 PM CDT
- **Designing for Vibration and Failure Analysis**
Fri., June 15, 2018, 1:00 - 2:30 PM CDT

Pedestrians and Bicycle Transport Planning

- **Introduction to Current Conditions and Trends in Biking and Walking**
Thurs., June 21, 2018, 11:00 AM - 12:30 PM CDT
- **Engineering and Infrastructure: Design for Walkability and Bikeability**
Thurs., June 21, 2018, 1:00 - 2:30 PM CDT
- **Developing a Walking and Biking Plan, Part I**
Fri., June 22, 2018, 11:00 AM - 12:30 PM CDT
- **Developing a Walking and Biking Plan, Part II**
Fri., June 22, 2018, 1:00 - 2:30 PM CDT

Registration

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

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.

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

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