

Agenda

Presented by Ms. Mary Paist-Goldman

Applications for Hydrologic Analysis

Watershed studies	Stormwater management
Regional flood models	Stream flow assessment

Hydrologic Principles

Hydrologic cycle	Watershed delineation methodology
Hydrographs	Rational method
SCS methods	

History and Development of US Army Corps HEC-HMS Software

HEC-HMS Application User Interface

Program file and project management
Data entry and editing

Building a Small-Scale Watershed Model

Data required	GIS data usage
Model setup	Analysis requirements

Model Output and Troubleshooting

Results and reporting	Mapping capabilities
Results interpretation	Calibration
Troubleshooting tips	

Demonstration of Small Watershed Model

Live demonstration of a small-scale HMS model

Building a Large-Scale Watershed Model

Data required	GIS data usage
Model setup	Analysis requirements
Modeling tips	

Demonstration of Larger Watershed Model

Live demonstration of a larger scale HMS model

Other Applications in HEC-HMS

Dam breach analysis	Irrigation design
Stormwater routings	Flood analysis

Introduction to HEC-HMS Modeling

Nashville, TN - Monday, November 11, 2019

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Learning Objectives

You'll be able to:

Explore the hydrologic cycle and **learn** how HEC-HMS models the hydrologic processes of watersheds.

Learn how hydrologic models can be used for regional flood modeling and stormwater management.

Get tips on entering, using and managing data with the HEC-HMS user interface.

Review case studies and best practice examples.

View a demonstration of a small watershed model and a larger watershed model.



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Introduction to HEC-HMS Modeling

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Use hydrologic models for regional flood modeling and stormwater management

Understand hydrologic principles and learn to read hydrographs

Explore the HEC-HMS application user interface for file and project management

Learn about small-scale and large-scale watershed modeling

Continuing Education Credits

Professional Engineers

7.0 PDHs (HSW)

Floodplain Managers

7.0 ASFPM CECs

Landscaping Architects

7.0 HSW PDHs/CE Hours

7.0 LA CES HSW PDHs



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Faculty



Ms. Mary Paist-Goldman *Principal and Owner of Rippled Waters Engineering, LLC based in New Jersey*

Ms. Paist-Goldman has more than 20 years of experience in water resource engineering with a particular focus on hydrologic and hydraulic modeling. Her firm specializes in water resources engineering services for a variety of projects. Prior to starting Rippled Waters in 2018, she served for many years as principal engineer and director of engineering services at a Mid-Atlantic natural resources firm. Ms. Paist-Goldman’s attention to detail and creative eye lead to out-of-the-box solutions for design.

She is an experienced modeler and has worked extensively on design and analysis using a variety of hydrologic and hydraulic programs including HEC-HMS, HEC-RAS, HydroCAD and XP-SWMM. Applications for her hydraulic modeling expertise include wetland restoration and mitigation; stream restoration; bridge repair and replacement; and dam repair, replacement or removal. Specifically related to riverine systems, Ms. Paist-Goldman has extensive expertise with stream restoration, natural channel design, and stabilization. Throughout her career, she has designed dozens of projects with low impact development techniques, green infrastructure, and with a focus on water quality – particularly in regard to TMDL compliance. She has designed rain gardens, cistern systems for water re-use in the form of landscape irrigation, bioretention islands, manufactured LID devices, infiltration basins, and constructed wetlands. In addition, Ms. Paist-Goldman has developed projects with goals of zero discharge upon completion, reduction in stormwater volume from pre- to post-development conditions, groundwater recharge to address aquifer deficits and reduced water quality impacts on environmentally sensitive streams. With regard to dams, she has worked on hazard classification analyses, dam breach analyses, and dam removal design for anadromous migratory fish passage. For dam safety compliance, she has also prepared inundation mapping, emergency action plans, operation and maintenance manuals and dam inspection reports for low to high hazard dams.

Here’s what past attendees had to say about the program and presenter Mary Paist-Goldman:

“Content and instruction were excellent.” – *Engineer*

“Enjoyed the seminar and how insightful and knowledgeable Ms. Paist-Goldman is.” – *Stormwater Management Engineer*

“Information on building the model was so very useful.” – *Civil Engineer*

Seminar Information

Scarritt-Bennett Center
1027 18th Avenue South
Nashville, TN 37212
(615) 340-7500

Tuition
\$289 for individual registration
\$269 for three or more registrations.
Each registration includes a complimentary continental breakfast and printed 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

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. You may also send another person to take your place.

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 - 5:00 pm

Continuing Education Credit Information

This seminar is open to the public and offers 7.0 PDHs (HSW) to professional engineers and 7.0 HSW PDHs/continuing education hours landscape architects in most states, including Tennessee. Educators and courses are not subject to preapproval in Tennessee.

This seminar is approved by the Landscape Architecture Continuing Education System for 7.0 HSW PDHs. Only full attendance is reportable to the LA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana, Maryland, New Jersey, North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education provider for New York engineers and landscape architects.

The Association of State Floodplain Managers has approved this course for 7.0 CECs.

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

Solar Photovoltaic Project Design and Development

- **Solar Photovoltaic Project Design and Development, Part I**
Wed., October 2, 2019, 11:00 AM - 2:15 PM CDT
- **Solar Photovoltaic Project Design and Development, Part II**
Thurs., October 3, 2019, 11:00 AM - 2:15 PM CDT

Special Inspections

- **Introduction to Chapter 17: Special Inspections**
Thurs., October 10, 2019, 11:00 AM - 12:30 PM CDT
- **Soils and Foundations**
Thurs., October 10, 2019, 1:00 - 2:30 PM CDT
- **Reinforced Concrete and Structural Steel**
Fri., October 11, 2019, 11:00 AM - 12:30 PM CDT
- **ACT Ceiling Grid, Epoxy Anchors, and Fire Penetrations**
Fri., October 11, 2019, 1:00 - 2:30 PM CDT

Component Tolerance Analysis

- **Introduction to Component Tolerance Analysis**
Thurs., October 17, 2019, 11:00 AM - 12:00 PM CDT
- **Dimensional Tolerance Analysis**
Thurs., October 17, 2019, 12:30 - 3:00 PM CDT
- **Application of Dimensional Tolerance Analysis**
Fri., October 18, 2019, 11:00 AM - 2:15 PM CDT

National Electrical Code

- **National Electrical Code, Part I**
Tues., October 22, 2019, 11:00 AM - 3:30 PM CDT
- **National Electrical Code, Part II**
Wed., October 23, 2019, 11:00 AM - 3:30 PM CDT
- **National Electrical Code, Part III**
Thurs., October 24, 2019, 11:00 AM - 3:30 PM CDT

Slope Stability and Landslide Prevention

- **Slope Movement and Mechanisms**
Thurs., October 24, 2019, 11:00 AM - 1:00 PM CDT
- **Slope Stabilization Methods**
Thurs., October 24, 2019, 1:30 - 3:00 PM CDT
- **Landslide Hazard and Risk Assessment**
Fri., October 25, 2019, 11:00 AM - 12:00 PM CDT
- **Slope Stabilization and Landslide Mitigation**
Fri., October 25, 2019, 12:30 - 2:30 PM CDT

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

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.	
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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.

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