

Agenda

Understanding and Applying the Science of Stormwater *D. Beyerlein*

- Hydrology, soil science and drainage
- Identifying consequences of storm events
- Stormwater modeling
- Runoff reduction, routing and storage
- Infiltration and percolation

Choosing Appropriate Storm Water Best Management Practices (BMPs) *D. Beyerlein*

- Stormwater management planning
- Sizing criteria
- Green infrastructure practices
 - Preservation of natural features and conservation design
 - Reducing impervious cover
- Green management techniques
 - Conservation of natural area
 - Rain gardens
 - Detention/retention ponds
 - Green roofs
 - Riparian buffers and filter strips
 - Stormwater planters
 - Vegetated swales
 - Rain barrels/cisterns
 - Disconnected runoff
 - Pervious pavement
 - Stream daylighting

Developing Stormwater Pollution Prevention Plans (SWPPP) *R. Betteridge*

- Including required elements *Assessing building sites*
- Choosing best management practices (BMPs)
- Planning for required inspection, maintenance and recordkeeping
- Obtaining plan certification *Implementing SWPPPs*

Developing Plans for Inspection, Monitoring, Maintenance and Recordkeeping *R. Betteridge*

- Understanding the science and terminology of stormwater management and monitoring
- Implementing monitoring plans
- Reviewing stormwater BMP case studies

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Washington State Stormwater Management 2024

Live, Interactive Webinar - Thursday, April 25, 2024

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HalfMoon Education Inc.
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Altoona, WI 54720-0278



Learning Objectives

You'll be able to:

- Discuss** the science of stormwater percolation, infiltration, and runoff.
- Get** an overview of stormwater management planning and discuss criteria for sizing systems.
- Manage** stormwater by preserving natural features and reducing impervious cover.
- Evaluate** green stormwater management techniques, including rain gardens, detention ponds, stormwater planters and vegetated swales.
- Explore** the process of developing stormwater pollution prevention plans.
- Implement** plans for inspecting, monitoring and maintaining stormwater management systems.



HalfMoon Education Live Webinars

Washington State Stormwater Management 2024

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- Examine** the science of stormwater
- Choose** appropriate stormwater best management practices
- Develop** stormwater pollution prevention plans
- Implement** plans for inspection, monitoring, and maintenance

Continuing Education Credits

- Professional Engineers**
6.0-Hour Learning Opportunity
- Architects**
6.0 HSW CE Hours
6.0 AIA LU | HSW
- Landscape Architects**
6.0 HSW CE Hours
6.0 LA CES HSW PDHs
- International Code Council**
.6 CEUs (Sitework)
- Floodplain Managers**
6.0 ASFPM CECs
- Certified Planners**
CM | 6



Webinar Information

Log into Webinar 8:00 - 8:30 am PDT	Break 12:15 - 12:45 pm PDT
Morning Session 8:30 am - 12:15 pm PDT	Afternoon Session 12:45 - 3:30 pm PDT

Tuition
\$319 for individual registration.
\$289 for two or more registrants from the same company at the same time.
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Faculty

Doug Beyerlein, PE, PH, D.WRE
With over 50 years of expertise in water resources planning, flood studies, and stormwater modeling, Mr. Beyerlein co-founded Clear Creek Solutions after distinguished roles in the San Francisco Bay area and Snohomish County. As a senior hydrologic engineer, he played a key role in shaping Snohomish County's surface water management program, excelling in watershed planning, monitoring, flood control, and compliance with water quality laws. A trailblazer in engineering, Mr. Beyerlein led the development of accurate tools for analyzing land development impacts on streams, earning his firm contracts for stormwater software in California, Oregon, and Washington. Having taught stormwater modeling to over 2000 professionals, he conducts workshops on HSPF theory and application. Licensed as a professional engineer in Washington and California, certified as a professional hydrologist, and a member of the American Academy of Water Resources Engineers, Mr. Beyerlein serves clients like the U.S. EPA and the Army Corps of Engineers. Noteworthy contributions include impactful stormwater papers such as "Why Standard Stormwater Mitigation Doesn't Work" and "Dumbing Down Hydrology"

Credit Information

This webinar is open to the public and is designed to qualify for 6.0 HSW continuing education hours for licensed architects and landscape architects in Washington state. This webinar offers a 6.0-hour learning opportunity to Washington engineers and may qualify for 6.0 PDHs for engineers in other states; please refer to specific state rules to determine eligibility.

The American Institute of Architects Continuing Education System has approved this course for 6.0 HSW LUs (Sponsor No. J885). Only full participation is reportable to the AIA/CES.

The Landscape Architecture Continuing Education System has approved this course for 6.0 HSW PDHs. Only full participation is reportable to the LA CES.

The International Code Council has approved this event for .6 CEUs in the specialty area of Sitework (Preferred Provider No. 1232).

This Association of State Floodplain Managers has approved this course for 6.0 CECs for floodplain managers.

HalfMoon Education is an approved CM Provider with the American Planning Association. This course is registered for CM | 6 for Certified Planners.

Attendance will be monitored, and attendance certificates will be available after the webinar for those who attend the entire course and score a minimum 80% on the quiz that follows the course (multiple attempts allowed).

On-Demand Credits
The preceding credit information only applies to the live presentation. This course in an on-demand format may not be eligible for the same credits as the live presentation; please consult your licensing board(s) to ensure that a structured, asynchronous learning format is appropriate. The following pre-approvals may be available for the on-demand format upon request:
6.0 HSW LUs (AIA), 6.0 HSW PDHs (LA CES). 6.0 ASFPM CECs

Russell Betteridge, CSM
Mr. Betteidge's career began as an engineering technician at Boeing, designing payload systems for 747 and 767's, then with Boeing Computer Networks and their phone systems nationwide. He transitioned to environmental engineering in the early '90s assisting engineers and scientists to clean up polluted groundwater and soils resulting from industrial and military activities as well as leaking underground storage tanks. Mr. Betteridge began public service in 2001 after seven years with civil engineers designing single-family, multifamily, and commercial developments including TESC plans. While at The City of Federal Way he supported the Public Works Division with stormwater inspections, erosion control inspections, and salmon restoration sampling efforts in support of illicit discharge detection and pollution responses. He has been continuously CESCL Certified since 2005 and an APWA certified stormwater manager for five years. He has developed training for city inspectors and regional information-sharing groups. Mr. Betteridge currently works at the City of Tukwila as the NPDES coordinator and manages the Lower Duwamish Source Control efforts to clean up the Superfund site called the Lower Duwamish Waterway.

Additional Learning

Federal and State Nutrient Reduction Strategies and Plans
- Monday, March 11, 2024 | 7:00 am - 2:30 pm PDT

Deep Dive into Wetland Mitigation Banking
- Tuesday, March 12, 2024 | 7:00 - 9:00 am PDT

Managing Nitrogen and Phosphorus in Soils
- Wednesday, March 13, 2024 | 7:00 - 9:00 am PDT

Current Issues in New Urbanism
- Thursday, March 14, 2024 | 7:00 am - 2:00 pm PDT

Stormwater Best Management Practices
- Friday, March 15, 2024 | 7:00 am - 2:15 pm PDT

The Language of Horticulture: A Primer
- Thursday, March 21, 2024 | 12:00 - 2:00 pm PDT

Public Water Systems
- Thursday, March 21, 2024 | 7:00 am - 2:30 pm PDT

**The Arborist Short Course:
Advanced Tree Knowledge for Better Tree Care**
- Friday, March 22, 2024 | 7:00 am - 2:30 pm PDT

Open Channels: Hydraulics, Design and Construction
- Monday, March 25, 2024 | 7:00 am - 2:30 pm PDT

Environmental Economics for Land and Development Professionals
- Wednesday, March 27, 2024 | 7:00 am - 2:00 pm PDT

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