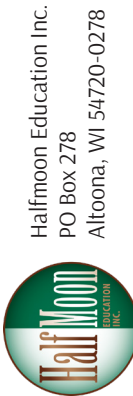


Agenda

Identifying Wetlands Presence of wetland vegetation Identification of wetland soils Importance of underlying wetland hydrology	<i>L. Eggering</i>
Understanding Federal and Missouri Wetlands Laws and Enforcement The Federal Clean Water Act National Food Security Act of 1985 Missouri Clean Water Law Implementing/enforcing agencies • U.S. Army Corps of Engineers • U.S. Environmental Protection Agency • U.S. Department of Agriculture • Missouri Department of Natural Resources	<i>B. Morrison</i>
Wetlands Permitting Process Wetlands determinations and delineations Determining applicability of regulations Wetland permitting and certification processes • Notice provisions • Review process • Mitigation/compensation requirements Appeals process	<i>S. Stumne</i>
Wetland Preservation, Restoration, Creation and Enhancement Understanding the importance of wetlands Wetland ecology • To replicate wetland ecology, first understand wetland ecology • Local wetland types • Reference sites Types of mitigation projects • Permittee-responsible • In-lieu fee programs • Mitigation banks Mitigation methods (restoration, creation, enhancement, preservation) Missouri wetland mitigation method • How to maximize credit production Site selection Construction tips Vegetation establishment, maintenance and monitoring Permitting	<i>S. Staten</i>

Missouri Wetland Law and Compliance
St. Louis, MO - Tuesday, August 7, 2018

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Learning Objectives

You'll be able to:

- Understand** how wetlands are delineated using wetland vegetation and soils data.
- Identify** the implementing and enforcing agencies that cover wetlands.
- Understand** the state, local and federal processes of wetland permitting.
- Discuss** the value and function of wetlands for water storage, habitat and pollution control.
- Review** wetland mitigation methods, including restoration, creation, enhancement and preservation.



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- Learn** how wetlands are identified and delineated
- Discuss** federal and Missouri wetland laws including the federal Clean Water Act and the Missouri Clean Water Law
- Understand** the functions and value of wetlands
- Review** the federal, state and local permitting process including the notice provisions and the review process
- Discuss** the importance of wetland mitigation and examine different types of mitigation projects

Continuing Education Credits

- Architects & Landscape Architects**
6.5 HSW Contact Hours/CEUs
6.5 AIA HSW Learning Units
6.5 LA/CES HSW PDHs
- Professional Engineers**
6.5 PDHs

- Geologists**
Non-Credit CE
- Floodplain Managers**
6.5 ASFPD CECs
- Attorneys**
8.0 Missouri CLE Hours
6.5 Illinois CLE Hours



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Faculty

Luke F. Eggering *PMC, PWS, CISEC Parsons, St. Louis*
Mr. Eggering is a professional wetland scientist (PWS) with over 29 years of experience working in the natural resources field for the U.S. Fish and Wildlife Service and Parsons. He has extensive experience in preparing and managing complex National Environmental Policy Act (NEPA) documents for both small and large-scale transportation and military projects including environmental impact statements (EIS), environmental assessments (EA), biological assessments (BA), categorical exclusions, and other technical documents, such as ecological studies, ecosystem restoration plans, natural resource GIS projects, and integrated natural resource management plans (INRMP). His primary environmental experience includes: endangered species management; wetland/moist soil management for waterfowl; wetland delineation, enhancement, and mitigation; flood control/management; and wildlife and fisheries management. Mr. Eggering was the lead wetland scientist for the Washington D.C., to Richmond, Virginia, High Speed Rail (DC2RVA) project and worked on draft environmental impact statement (DEIS) that involved delineating wetlands and streams for over 120 miles of existing and proposed rail corridors. He has worked extensively across the Midwest and eastern U.S and multiple USACE Districts.

Bruce A. Morrison *The Morrison Law Firm and Great Rivers Environmental Law Center, St. Louis*
Mr. Morrison is principal of The Morrison Law Firm, as well as general counsel of Great Rivers Environmental Law Center, both in St. Louis, Missouri. His clients range from large corporations to local

governments, small businesses, individuals, and citizen organizations. His work includes matters involving regulatory enforcement, property damage, land use, property development, real estate transactions, water quality and Superfund issues, and he represents businesses in breach of contract matters, business-to-business disputes, and disputes with government entities.

Stephen P. Stumne, PWS
Wood Environment & Infrastructure Solutions, Inc., St. Louis
Mr. Stumne has more than 25 years of professional experience providing wetland and waters of the U.S. delineations, floristic quality assessments (FQA), wetland function/quality assessments, impact analysis, stream evaluations, Clean Water Act Section 401/404 permitting, Rivers and Harbors Act Section 10 Permitting, mitigation plan development, ecosystem restoration, NEPA analysis and documentation, and listed species investigations under the Endangered Species Act. He has performed hundreds of wetland delineations, provided supervision and oversight of wetland delineations and reporting performed by others, and acquired permits and directed mitigation planning within several U.S. Army Corps of Engineers (USACE) Districts including St. Louis, Rock Island, Chicago, Detroit, Louisville, Kansas City, Tulsa, Little Rock, Albuquerque, Philadelphia, Fort Worth, and Galveston. Mr. Stumne has acquired USACE permits for projects within various industries including oil and gas pipelines, electric transmission, electric generation (fossil fuels and nuclear), transportation, mining, and general industry. Projects have ranged from small-scale construction to complex and contested electric transmission and oil/gas pipeline projects with construction costs over \$1B.

Shane C. Staten, PWS *Terra Technologies, St. Louis*
Mr. Staten's career has been focused on wetland and stream restoration. He received his bachelor's degree in biology with honors from the University of California, Berkeley, and has a master's degree in Environmental Management from Duke University, where Mr. Staten was a Doris Duke Charitable Foundation Conservation Fellow. A certified professional wetland scientist, he is a past president of the local chapter of the Society of Wetland Scientists. For the last 13 years he has been the head of Terra Technologies' Wetland and Stream Mitigation Banking Division, where he has been a primary or contributing designer for 14 approved and 10 proposed wetland and stream mitigation banks across Missouri and eastern Kansas encompassing more than 3,100 acres of restored wetland, riparian corridor, and stream habitats. These projects have resulted in significant improvements in water quality and wildlife habitat because of the protection of more than ten miles of stream channels with greatly expanded riparian corridors, restoration of four miles of historical stream channels, and establishment of more than a thousand acres of floodplain wetlands. He has also performed construction inspection, monitoring, and group site visits, including hosting two wetland conference field trips and senior EPA officials. Mr. Staten manages the Terra Technologies St. Louis office and is responsible for Clean Water Act Section 404 and 401 permits for central and eastern Missouri, as well as for wetland delineations and stream system jurisdictional assessments.

Seminar Information

Holiday Inn Forest Park
5915 Wilson Avenue
St. Louis, MO 63110
(314) 645-0700

Tuition
\$279 for individual registration
\$259 for three or more 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 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 \$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.

Continuing Education Credit Information

This seminar is open to the public and offers up to 6.5 HSW continuing education hours to architects and landscape architects and 6.5 PDHs for engineers in most states, including Missouri and Illinois. Educators and courses are not subject to preapproval in these states.

HalfMoon Education is deemed an approved continuing education sponsor for architects and landscape architects in New York. HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Maryland, New Jersey, New York (NYSED Sponsor No. 35), North Carolina, and North Carolina.

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

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

This seminar offers a non-mandatory continuing education opportunity to geologists.

The Missouri Bar MCLE Board approved this activity for 8.0 CLE credit hours for attorneys. The Illinois MCLE Board has approved this program for 6.5 general MCLE credit hours for attorneys.

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

Handling Ethical Issues in Professional Engineering Practice
Fri., Aug. 3, 2018, 11:00 AM - 12:00 PM CDT

Technical Writing

- **Technical Writing Basics**
Thurs., Aug. 9, 2018, 12:00 PM - 2:00 PM CDT
- **Planning Documents**
Thurs., Aug. 9, 2018, 2:30 - 4:30 PM CDT
- **Writing Documents**
Fri., Aug. 10, 2018, 12:00 PM - 2:00 PM CDT
- **Revising and Editing Documents**
Fri., Aug. 10, 2018, 2:30 - 4:30 PM CDT

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

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

Missouri Wetland Law and Compliance

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How to Register		Registrant Information
Online: www.halfmoonseminars.org		Name: _____
Phone: 715-835-5900		Company/Firm: _____
Fax: 715-835-6066		Address: _____
Mail: HalfMoon Education Inc., PO Box 278, Altoona, WI 54720-0278		City: _____ State: _____ Zip _____
Complete the entire form. Attach duplicates if necessary.		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.

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*
Credit Card Number: _____
Expiration DATE: _____ CVV2 Code: _____
Cardholder Name: _____
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City: _____ State: _____ Zip: _____
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