

# Credit Information

## Missouri Wetlands Law and Compliance

This webinar offers 6.5 PDHs to professional engineers in all states and 6.5 HSW continuing education hours to architects licensed in all states. It offers 6.5 HSW continuing education hours to landscape architects in most states. HalfMoon Education will not be seeking landscape architect course approval in Florida, New Jersey, or North Carolina.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida (Provider No. 0004647), Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), and North Carolina (S-0130). HalfMoon Education is deemed an approved continuing education sponsor for New York engineers and architects via its registration with the American Institute of Architects Continuing Education System (Regulations of the Commissioner §68.14(i)(2) and §69.6(i)(2)). Other states do not preapprove continuing education providers or courses.

The American Institute of Architects Continuing Education System has approved this course for 6.5 LU | HSW (Sponsor No. J885). The Landscape Architecture Continuing Education System has approved this course for 6.5 HSW PDHs. Only full participation is reportable to the AIA/CES and LA CES.

The Missouri Bar has approved this course for 7.8 CLE hours (0.0 ethics hours).

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

Completion certificates will be awarded to participants who complete the entire event online, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

## International Residential Code

This seminar is open to the public and offers 7.0 continuing education hours to professional engineers and 7.0 HSW continuing education hours to architects in Missouri.

Architects and engineers seeking continuing education credit in other states will be able to apply the hours earned at this seminar, in most cases. Refer to specific state rules to determine eligibility.

This event is approved by the American Institute of Architects Continuing Education System for 7.0 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

The International Code Council has approved this event for .7 CEUs in the specialty area of Building (Preferred Provider No. 1232).

This event offer a non-credit continuing education opportunity to construction contractors. This event has not been approved by any state with a continuing education requirement for contractors.

In-person 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.

Completion certificates will be awarded to participants who complete the entire event online, respond to all prompts, and earn a passing score (80%) on the quiz that follows the presentation (multiple attempts allowed).

## Can't Attend? Order the Programs as a Self-Study Packages!

Recordings of each program are available for purchase. See course listing online for more information and please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit. Self-study packages do not qualify for AIA or LA CES credit.

## Live, In-Person Seminar and Live Webinars

- Missouri Wetlands Law and Compliance
- International Residential Code

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# Live, Interactive Webinars

## Missouri Wetlands Law and Compliance

- Online Webinar Only | Thursday, October 21, 2021

## International Residential Code

- St. Louis, MO or Online | Thursday, October 28, 2021

To register, view detailed presenter biographies,  
and see other learning opportunities, please visit:

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# Live, In-Person Seminars and Live Webinars



## Missouri Wetlands Law and Compliance

Online Webinar Only | Thursday, October 21, 2021

8:30 am - 4:30 pm CDT

Credits: Professional Engineers: 6.5 PDHs      Architects: 6.5 HSW CE Hours  
AIA: 6.5 LU | HSW      Landscape Architects: 6.5 HSW CE Hours  
LA CES: 6.5 HSW PDHs      Floodplain Managers: 6.5 ASFPM CECs  
Attorneys: 7.8 MO CLE Hours



## International Residential Code

St. Louis, MO or Online | Thursday, October 28, 2021

8:30 am - 5:00 pm CDT

Credits: Professional Engineers: 7.0 PDHs      Architects: 7.0 HSW CE Hours  
AIA: 7.0 LU | HSW      International Code Council: .7 CEUs (Building)



AIA  
Continuing  
Education  
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[WWW.HALFMOONSEMINARS.ORG](http://WWW.HALFMOONSEMINARS.ORG)

# Missouri Wetlands Law and Compliance

Online Webinar Only | Thursday, October 21, 2021

8:30 am - 4:30 pm CDT (incl. a 60-min break)

**Tuition:** \$289 per registrant, \$239 per registrant for three or more

**Credits:** Professional Engineers: 6.5 PDHs Architects: 6.5 HSW CE Hours  
AIA: 6.5 LU|HSW Landscape Architects: 6.5 HSW CE Hours  
LA CES: 6.5 HSW PDHs Floodplain Managers: 6.5 ASFPM CECs  
Attorneys: 7.8 MO CLE Hours

## Webinar Information:

Webinars are presented via GoToWebinar. Instructions and login information will be provided in an email sent close to the date of the webinar.

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## Agenda

### Identifying Wetlands

*L. Eggering*

- Presence of wetland vegetation Identification of wetland soils
- Importance of underlying wetland hydrology

### Understanding Federal and State Wetlands Laws and Enforcement

*B. Morrison*

*B. Menees*

- The Federal Clean Water Act
- National Food Security Act of 1985
- State laws and regulations
- Implementing/enforcing agencies
  - U.S. Army Corps of Engineers
  - U.S. Environmental Protection Agency
  - U.S. Department of Agriculture
  - U.S. Fish and Wildlife Service
  - Missouri Department of Natural Resources

### Wetlands Permitting Process

*S. Miller*

- Wetlands determinations and delineations
- Determining applicability of regulations
- Wetland permitting and certification processes
- Notice provisions Review process
- Mitigation/compensation requirements Appeals process

### Wetland Mitigation: Restoration Ecology, Design, and Project Success

*S. Staten*

- Understanding the importance of wetlands
- Wetland ecology
  - To replicate wetland ecology, first understand wetland ecology
  - Local wetland types
  - Reference sites
- Mitigation options: banks, in-lieu fee programs, and permittee-responsible sites
- Mitigation methods: restoration, creation, enhancement, and preservation
- In-depth: Missouri wetland mitigation method
  - How to maximize credit production
- Wetland design strategies Site selection
- Real world design example Construction tips
- Vegetation establishment and maintenance
- Design for wildlife Performance standards
- Monitoring

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AIA: 7.0 LU|HSW International Code Council: .7 CEUs (Building)

## Courtyard St. Louis Airport/Earth City

3101 Rider Trail South  
St. Louis, MO 63044  
(314) 209-1000

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## Agenda

### Development and Enforcement of International Residential Code

- International Residential Code (IRC) adoption and enforcement in MO
- Recent and anticipated Code amendments Future of the Code

### Building Planning and Shell Construction (Chapters 2-10)

- Definitions Alternative provisions and design criteria
- Wind effects and protection of openings
- Seismic provisions Story height and live loads
- Snow loads Fire-resistant construction and exterior walls
- Dwelling unit separations and garage separation
- Ceiling heights Glazing
- Garages and carports Ingress, egress and stairways
- Fire and carbon monoxide safety and detection
- Foam plastic Wood and wood-based products
- Accessibility Floods, storms and drainage
- Soils and foundations Framing and fastening
- Walls and wall covering Roof/ceiling construction
- Roof assemblies Fireplaces and chimneys

### Energy Efficiency (Chapter 11)

- Compliance Building thermal envelope
- Climate classifications Permanent energy certificate
- Insulation and fenestration Building systems
- Lighting

### Mechanical, Fuel, Plumbing and Electrical Systems

- Appliance installation and exhaust systems
- Ventilation Hydronic systems
- Fuel gas systems and appliances
- Plumbing fixtures Drains
- Backflow preventers, venting, sumps and ejectors
- Fire sprinkler systems Electrical system grounding
- Intersystem bonding termination Overcurrent devices
- Electrical outlets Luminaires
- Pools, spas and hot tubs

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## Choose the way you want to learn!

International Residential Code will be presented simultaneously live, in-person *and* live online! Move from in-person to online anytime!

**International Residential Code COVID Health Considerations:** In accordance with guidance from the Centers for Disease Control and Prevention (CDC), only those who are fully vaccinated should gather indoors without masks. Those not yet fully vaccinated should continue social distancing and wearing facemasks indoors. Please review CDC guidance for recent developments.

***No walk-in registrations will be accepted.***

# Faculty

## Missouri Wetlands Law and Compliance

**Luke F. Eggering PMC, SPWS** *Project Manager/Senior Biologist, Parsons, St. Louis*

**Bruce A. Morrison**

*The Morrison Law Firm and Great Rivers Environmental Law Center, St. Louis*

**Bob Menees** *Staff Attorney with Great Rivers Environmental Law Center in St. Louis*

**Stephanie Miller, PWS**

*Senior Scientist, Wood Environment & Infrastructure Solutions, Inc., St. Lou*

**Shane C. Staten, PWS** *Senior Restoration Manager, Swallowtail Environmental, St. Louis*

## International Residential Code

**Joseph Iliff, CBO** *Building Official for City of Republic, Missouri*

***See course listings online to view detailed presenter information.***

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# Additional Webinars

## Drones in Construction

- Tues, Sept 28, 2021 | 9:30 am - 5:00 pm CDT

## Focusing on Site Engineering: Under a Microscope

- Wed, Sept 29, 2021 | 2:00 - 4:00 pm CDT

## A Roadmap to Ethical Issues in Construction: A Primer for Design Professionals

- Wed, Sept 29, 2021 | 11:00 am - 1:00 pm CDT

## Focus on Slope Stability Analysis

- Thurs, Sept 30, 2021 | 11:00 am - 1:00 pm CDT

## How to Implement a Construction Site Grading Plan

- Thurs, Sept 30, 2021 | 8:30 - 10:30 am CDT

## How to Handle Claim Issues and Dispute Resolution for Public and Private Construction Projects

- Tues, Oct 12, 2021 | 10:00 am - 1:15 pm CDT

## Soil Testing, Properties and Uses

- Wed, Oct 13, 2021 | 10:00 am - 12:00 pm CDT

## International Building Code 2021

- Thurs, Oct 14, 2021 | 8:00 am - 4:00 pm CDT

## Advanced Healthy HVAC: Balancing First Cost, Occupant Comfort, and Safety

- Fri, Oct 15, 2021 | 8:30 am - 5:00 pm CDT

## AIA Contract Document Workshop

- Mon, Oct 18, 2021 | 8:30 am - 4:30 pm CDT

## SketchUp for Building Professionals

- Tues, Oct 19, 2021 | 11:00 am - 2:45 pm CDT

- Wed, Oct 20, 2021 | 11:00 am - 2:45 pm CDT

## Retaining Walls and Lateral Earth Pressure

- Wed, Oct 20, 2021 | 10:00 am - 12:00 pm CDT

## Internal Design of MSE Walls and Geosynthetics

- Wed, Oct 27, 2021 | 10:00 am - 1:15 pm CDT

For more information and other online learning opportunities visit: **[www.halfmoonseminars.org](http://www.halfmoonseminars.org)**