

Agenda

Ethics Issues in Wetland Preservation and Development Acting in the best interest of the public on wetlands issues - Finding alternatives to wetlands destruction - Including wetland preservation in development plans Convincing clients to preserve and restore wetlands	<i>N. Ellermann</i>
Urban Stormwater: Environmental Impacts and Solutions Urbanization effects on watersheds Regulatory drivers Introduction to stormwater control devices Stormwater wetlands as an innovative solution	<i>J. Hathaway</i>
Understanding Federal and Tennessee Wetlands Laws and Enforcement The Federal Clean Water Act, National Food Security Act of 1985 Tennessee Water Quality Control Act 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 - Tennessee Department of Environment and Conservation	<i>L. Smith</i>
Wetlands Permitting Process Wetland delineations Wetland jurisdictional determinations Tennessee wetlands permitting process Wetland compensatory mitigation Permit appeals process	<i>D. Winter</i>
Stream Mitigation The stream function pyramid and stream quantification tool Stream mitigation guidelines Impacts to streams Mitigation options and preferences Banks, In lieu fee programs, permittee responsible	<i>A. Spiller</i>
Stream Restoration What is stream restoration? Techniques, trends, and design methodology/considerations	<i>A. Spiller</i>
Wetland Conservation Easements Understanding the role of a land trust holder - Projects that fit with a typical land trust mission - Approval and review process - timeline and cost Conservation easement steward vs land steward	<i>C. Henderson</i>

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Tennessee Wetlands & Streams: Law and Compliance

Live, Interactive Webinar - Tuesday, August 9, 2022

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Learning Objectives

You'll be able to:

Anticipate ethical issues in wetlands preservation and development, and identify actions that are in the best interest of the public on wetlands issues.

Consider the environmental impacts of urban stormwater and the possibility of using stormwater wetlands as an innovative solution.

Explore the Tennessee Water Quality Control Act and the Federal Clean Water Act and their roles in wetland regulation.

Participate in the wetlands permitting process in Tennessee, including the appeals process.

Examine the impact of wetlands on stream restoration and mitigation.

Explore the use of wetland conservation easements, and discuss the approval process.



HalfMoon Education Live Webinars

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Explore ethical issues in wetland preservation and development

Examine urbanization effects on watersheds

Analyze stormwater wetlands as an innovative solution

Understand Federal and Tennessee wetlands laws and enforcement

Discuss Tennessee wetland permitting and the permit appeals process

Explore stream mitigation options and preferences and discuss stream restoration

Learn about wetland conservation easements

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Faculty

Nate Ellerman graduated from Iowa State University with a degree in Biology, and he graduated from the University of Kansas with a degree in Civil Engineering with an emphasis in Environmental Engineering. He is an Eagle Scout and was member of the Reptile and Amphibian Club at Iowa State University. Mr. Ellerman is currently working on his master's degree in Environmental Engineering from the University of Tennessee. He works as an engineer for the City of Nashville in the Water Services Department. Mr. Ellerman reviews construction plans to ensure developmental designs are compliant with local, state, and federal regulations. He is very passionate about conservation. Mr. Ellerman aspires to become an environmental project manager and utilize his educational background to reduce pollution and manage habitat restoration projects throughout his career.

Jon Hathaway is an associate professor in the Department of Civil and Environmental Engineering at the University of Tennessee, Knoxville. He received his PhD degree from North Carolina State University in 2010, where he studied the fate, transport, and removal of indicator bacteria in urban stormwater runoff. After a brief research fellowship at Monash University in Melbourne, Australia, and nearly two and half years at one of the nation's leading ecological design and consulting firms, he joined the Department of Civil and Environmental Engineering at the University of Tennessee. Dr. Hathaway is a recipient of the National Science Foundation CAREER award and serves as an associate editor for the *Journal of Environmental Engineering*. He is an elected member of both the ASCE EWRI Urban Water Resources Research Council Core Group and the International Water Association Joint Committee on Urban Drainage.

Larry J. Smith received his B.S. degree in Science Education in 1980 and law degree in 1993, both from the University of Memphis. He has always been interested in the environment and the outdoors. After law school, Mr. Smith worked as a community organizer for the Mid-South Peace and Justice Center in their toxics awareness program. In 1997 he went on to be the first executive director of the Wolf River for Conservancy. A local, and still thriving, river and wetland protection land trust. In 2003 he left the not-for-profit world and entered the government sector, still in the field of environmental protection. Mr.

Smith headed up the Shelby County Environmental Programs office and then the Air Quality Improvement Branch. He is now the Technical Manager for Shelby County TN Air Pollution Control.

David Winter is the founder and president of the professional scientific services firm, Lord and Winter. Lord and Winter are a leading natural resources services company headquartered in Nashville, Tennessee, that has success in obtaining environmental permits for hundreds of developments across Middle, West, and East Tennessee. Mr. Winter holds an M.S. degree in Geochemistry from Northern Illinois University and B.S. degrees in Biology and Geology from the University of Wisconsin at Eau Claire. His experience spans 40 states and includes some of the largest environmental programs nationwide.

Adam Spiller is the regional practice leader for Natural Resources at KCI Technologies. He has been at KCI for over 18 years and has a Biology and Environmental Science degree from the College of William and Mary and a master's in Environmental Management from Duke University. Mr. Spiller's work at KCI has covered all aspects of stream and wetland restoration, dam removal, stream assessment, and other natural resource projects. He specializes in mitigation banking, stream relocations for transportation projects, design-build of large stream bank repair projects, MS4 and TMDL permit support, and QA/QC of design plans.

Christie Henderson is the director of Land Conservation and has been with TennGreen Land Conservancy since May 2012. In her role, she shepherds complicated, urgent, and detailed land transactions, often with national partners and governmental agencies, to acquire, restore, and conserve important lands and landscapes throughout Tennessee and beyond. Ms. Henderson developed a love of the outdoors while growing up in West Tennessee. She followed her outdoor passion through college and holds an M.S. degree in Biology from Tennessee Technological University (TTU). In 2018, she was named Tennessee Wildlife Federation's Land Conservationist of the Year. In 2019, a major land acquisition project that she spearheaded won the U.S. Forestry Department's "Wings Across the Americas Habitat Conservation Partnership Award."

Webinar Information

Log into Webinar	Break
8:00 - 8:30 am CDT	11:55 am - 12:25 pm CDT
Morning Session	Afternoon Session
8:30 - 11:55 am CDT	12:25 - 3:20 pm CDT

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Continuing Education Credit Information

This webinar is open to the public and is intended to offer 6.0 PDHs to professional engineers, 6.0 HSW continuing education hours to licensed architects, and 6.0 HSW continuing education hours to landscape architects in Tennessee. Professionals licensed in other states will be able to claim the hours earned at this webinar, in most cases. Refer to specific state rules to determine eligibility.

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The American Institute of Architects Continuing Education System has approved this course for 6.0 LU|HSWs (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.

HalfMoon Education is an approved continuing education sponsor for land surveyors licensed in Indiana (License No. CE10600325), Maryland and North Carolina (S-0130). This course has been submitted to The Tennessee Board of Examiners for Land Surveyors; approval is pending.

The Tennessee Commission on Continuing Legal Education has approved this course for 6.0 CLE hours; 5.0 general hours and 1.0 dual hour.

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Registration

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