

## Advanced Conservation Drainage Training Program CONSTRUCTED WETLAND SESSION - PRESENTERS

### **Jill Kostel, Senior Environmental Engineer** **The Wetlands Initiative**



Dr. Jill Kostel is the senior environmental engineer/project manager at the Wetlands Initiative. The Wetlands Initiative, a non-profit organization, is dedicated to restoring the wetland resources of the Midwest to improve water quality, increase wildlife habitat and biodiversity, and reduce flood damage. Jill is the project manager for the Wetland Initiative's "Smart Wetlands," which advances the use of small, farm-based constructed wetlands to naturally reduce nutrient runoff in tile drainage. She works directly with farmers and landowners to provide technical assistance in the design and implementation of constructed wetlands and partners with organizations to increase education and outreach about conservation drainage practices. Originally from Pittsburgh, Jill stayed in Illinois after receiving her PhD in Environmental Engineering at Northwestern University.

### **Maria Lemke, Director of Conservation Science** **The Nature Conservancy**



Dr. Maria Lemke has coordinated 15+ years of research along the Mackinaw River at an experimental project site and at the Conservancy's Research and Demonstration Farm, owned by the Franklin family in Lexington, IL. The focus of this research includes gaining a better understanding of why local farmers implement conservation practices; how best to reach them and influence their conservation decisions; and measuring the effectiveness of these practices at mitigating agricultural impacts on freshwater streams and rivers, including the effectiveness of constructed wetlands for mitigating nutrient losses from tile drainage. Maria earned her B.S. and M.S. degrees in Zoology from the University of Oklahoma, and her Ph.D. from the University of Alabama studying the ecology of aquatic invertebrates. She was a postdoctoral ecologist with the Illinois Natural History Survey before joining TNC.

**Ruth Book, State Conservation Engineer**  
**USDA Natural Resources Conservation Service – Illinois**



Dr. Ruth Book is the State Conservation Engineer for the Natural Resources Conservation Service in Illinois and has been named Fellow of the American Society of Agricultural and Biological Engineers. She is responsible for the planning and design of all NRCS engineering conservation practices in the state. In recent years, Ruth has also provided national leadership for NRCS technical expertise with conservation drainage practices. With NRCS, Ruth has provided leadership in the development of software and technical guidance for engineering design. However, her wide-ranging career includes work in industry and academia, as well as government. She began her engineering career in hydraulic system design with Cessna Fluid Power and

Eaton Hydraulics in Kansas and Minnesota. After taking time away from employment to raise a young family, she went back to school at the University of Illinois, earning a doctorate and doing some research and teaching. She joined NRCS in September 2000.

**Krista Kirkham, Assistant Aquatic Ecologist**  
**The Nature Conservancy**



Krista is the assistant aquatic ecologist for The Nature Conservancy's Illinois Chapter. She and her team work with several agricultural agencies, landowners, and universities to implement agricultural conservation practices like constructed wetlands and study how they improve water quality in the Mackinaw River. She tirelessly manages water quality monitoring efforts for the Conservancy's paired watershed study and at the Franklin Research and Demonstration Farm. Krista earned her B.S. in Environmental Biology from Eastern Illinois University and her M.S. in Conservation Biology from Illinois State University.

**Kim Martin**  
**USDA Farm Services Agency**

Kim is a Conservation Program Specialist in the Conservation and Environmental Programs Division with the USDA Farm Service Agency state office in Springfield, Illinois.



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