

MN Lake Superior Watershed Stream Science Symposium
January 7-8, 2014

Presenter Biographies
(in order of presentation)

Day One, January 7, 2014

Tom Landwehr, DNR Commissioner Keynote 9:10 am

Tom Landwehr was appointed DNR Commissioner by Governor Dayton in 2011. Formerly Assistant State Director for The Nature Conservancy, he now oversees a staff of about 2,700 located in St. Paul and around the state, with the mission of working with Minnesota citizens to conserve and manage the state's natural resources, providing outdoor recreation opportunities, and providing for commercial uses of natural resources in a way that creates a sustainable quality of life.

Tom also directed the Ducks Unlimited conservation programs in Minnesota and Iowa. He worked for the DNR from 1982 through 1999, primarily with wetland wildlife conservation programs. He has BS and MS degrees in Wildlife Management and an MBA with a finance concentration, all from the University of Minnesota, where he is currently Adjunct Instructor of a course on wetlands conservation.

Commissioner Landwehr served for seven years on the Shoreview City Council. He formerly taught adult hunter education, and is himself an ardent hunter, camper, angler and outdoor enthusiast.

John Linc Stine, MPCA Commissioner Keynote 9:35 am

John Linc Stine was appointed Commissioner of the Minnesota Pollution Control Agency (MPCA) by Governor Mark Dayton effective May 14, 2012.

John joined the MPCA in March 2011, as Deputy Commissioner. Prior to joining the MPCA, John served as Assistant Commissioner at the Minnesota Department of Health where he was responsible for overseeing the department's public health emergency preparedness, environmental health, infectious disease prevention/control and the public health laboratory functions.

John also worked for 25 years with the Minnesota Department of Natural Resources as a hydrologist and administrator specializing in shoreland, flood plain, and wild and scenic river programs, water resource management and regulation. John also served as Assistant Director of the Trails and Waterways Division.

John received a Bachelor of Science degree in Soil and Water Resource Management from the University of Minnesota. He is married with two sons.

Julie Westerlund, DNR 10:00 am

Julie Westerlund is the Clean Water Coordinator for the Minnesota Department of Natural Resources. Julie started out at DNR as a fisheries research biologist, then moved into coordination work with trout stream watersheds and community assistance, where she helped local communities understand land use impacts to water quality through the NEMO (Nonpoint Education for Municipal Officials) program. In the early 2000s, she became the Education and Communications Manager at the Minnehaha Creek Watershed District, where she ran multiple programs and events to raise awareness and change behavior at the local level. She returned to DNR in her current role in November of 2010. She now works as a policy consultant to senior managers and helps drive coordination and integration among state agency programs that are made possible by the Clean Water Fund. Julie is co-chair of the Interagency WRAPS and Implementation sub-team, which makes recommendations to an assistant-commissioner level coordination team for Clean Water.

PRESENTATION TITLE, Minnesota Water Management Framework

John Lenczewski, MN Trout Unlimited 10:45 am (Co-Presentation with Kris Larson)

As Executive Director of Minnesota Trout Unlimited since 2009, Mr. Lenczewski leads MNTU's advocacy, grant writing and conservation efforts statewide. A lifelong resident of Minnesota, grassroots volunteer of MNTU and avid fisherman, he has explored Lake Superior tributaries extensively, observing firsthand the importance of good land use practices to sustaining healthy coldwater ecosystems. Day-to-day, Mr. Lenczewski works to bring together anglers, public agencies, conservationists and other partners to protect, restore and sustain streams at both the individual watershed and basin level. Mr. Lenczewski also manages MNTU's statewide program of habitat restoration and enhancement projects, including many on North Shore rivers.

PRESENTATION TITLE, The Role of Non-Profits

Kris Larson, MN Land Trust 10:45 am (Co-Presentation)

Kris Larson serves as Executive Director for the Minnesota Land Trust, where he has worked in various capacities since 1998. The Minnesota Land Trust is a state-wide non-profit organization with a mission to preserve Minnesota's natural and scenic heritage through public and private partnerships. From 2003 to 2006, Mr. Larson served as the Executive Director of the Colorado Coalition of Land Trusts based in Denver, where he oversaw program delivery to more than 60 land trusts and local government conservation programs. Prior to 1998, he worked at the Brandywine

Conservancy in Pennsylvania. Mr. Larson has an undergraduate degree from Carleton College and a Masters in Environmental Design from the University of Georgia.

PRESENTATION TITLE, The Role of Non-Profits

Lee Johnson, USFS 11:00 am

Lee Johnson received an undergraduate degree in Anthropology and History from the University of Wisconsin-Madison, and a Masters of Anthropology from the University of Minnesota-Twin Cities. Lee has worked for the Superior National Forest Heritage Resource Program since 2001, and currently serves as the Forest Archaeologist. Lee has worked for the Wisconsin State Historic Preservation Office, the Minnesota Department of Natural Resources, and has spent considerable time guiding wilderness canoe trips across the Canadian Shield. Lee's research interests include the archaeology and history of the fur trade period in the western Superior Basin, hunter gatherer economies in the sub-boreal region of North America, and 19th century mining and timber industries in Northeastern Minnesota.

PRESENTATION TITLE, Historic Overview of Logging in the Cross River Watershed: 1895-1925

Karen Gran, UMD 11:20 am

Dr. Karen Gran is an Associate Professor in the Department of Geological Sciences at the University of Minnesota Duluth. She got her Ph.D. from the University of Washington, M.S. from the University of Minnesota, and B.A. from Carleton College. Her research focuses on fluvial geomorphology, including how channels evolve under changing conditions, from volcanic eruptions to land use changes.

PRESENTATION TITLE, Geologic History of Western Lake Superior Streams

Faith Fitzpatrick, USGS 11:40 am

Faith Fitzpatrick is a research hydrologist at the U.S. Geological Survey, Wisconsin Water Science Center in Madison, WI where she has worked on fluvial geomorphology studies since 1991. She received her Ph.D. at the University of Wisconsin-Madison. She has spent much of her career working on Great Lakes streams. Her interests involve historical stream studies, sediment budgets, valley alluvial chronologies, sediment source/sink tracking, habitat assessments, and stream restoration. She's been involved in mapping and tracking sediment-related contaminants. Since 2011 she's served as science coordinator for the U.S. EPA's emergency response to the tar sand oil spill in the Kalamazoo River.

PRESENTATION TITLE, Diagnostic Geomorphic Methods for Understanding Future Stream Behavior of Lake Superior Streams – What Have We Learned in Two Decades?

John Jaschke, BWSR Executive Director Keynote 12:45 pm

John Jaschke is the Executive Director of the Minnesota Board of Water and Soil Resources (BWSR) (see <http://www.bwsr.state.mn.us>). He was formerly the Dakota County Water Resources Manager and the Administrator of the Vermillion River Watershed Organization. His prior positions were as Land and Water Section Administrator and Wetlands Program Manager at the Minnesota Board of Water and Soil Resources (BWSR), and Area Hydrologist with the Minnesota Department of Natural Resources (DNR) in Duluth and New Ulm. He has B.S. degrees in Geology and Geophysics from the University of Minnesota and a M.A. in Public Administration from Minnesota State University – Mankato. He grew up on a dairy farm in central Minnesota (Morrison County) with 10 younger siblings.

Brenda Halter, Superior National Forest Supervisor Keynote 1:10 pm

Brenda Halter has been the Forest Supervisor for the Superior National Forest for just under two years. She has a Master's degree in biology and was a forest hydrologist and forest planner for much of her 20 year career with the Forest Service.

PRESENTATION TITLE, Role of the Superior National Forest in Lake Superior Watershed Management

Joe Magner, UMN 1:35 pm

Joe Magner received degrees from the University of Wisconsin and Minnesota and has served as an environmental scientist, advocate and educator in varying roles for 35 years; advising federal, state and local governments and international projects in China, India, Azerbaijan and South Africa.

Dr. Magner is a research professor in the Department of Bioproducts & and Biosystems Engineering at the University of Minnesota. He teaches classes in water quality, hydrology and watershed management and advises graduate students seeking to learn more about watershed systems. Joe has over 70 publications and is a co-author of the 4th edition of *Hydrology and the Management of Watersheds* published by Wiley-Blackwell (2012).

PRESENTATION TITLE, An Isotopic Approach to North Shore Lake Superior Watershed Management

Seth Moore, Grand Portage Department of Biology and Environment 1:55 pm

Seth has worked for the Grand Portage Band since 2005, he presently manages the Grand Portage Department of Biology and Environment. He has a PhD in Water Resources Science from the University of Minnesota (2008), a master's degree in

Environmental Biology also from University of Minnesota (1998), and a bachelor's degree in Biology and Environmental Studies from Northland College in Ashland, WI(1994). Seth focuses his research efforts on subsistence species of the Grand Portage Band of Chippewa. His current projects include coaster brook trout restoration and identifying habitats used by moose under a warming climate.
PRESENTATION TITLE, Effects of Climate Change on Watersheds of Grand Portage Indian Reservation; a Case Study in Climate Change Adaptation Planning.

Eric Merten, Wartburg College 2:15 pm

Dr. Merten completed his MS and PhD in the Twin Cities, and has centered most of his research in northern Minnesota. His MS examined effects of forest harvest on streams and his PhD examined dynamics of wood movement. During his postdoc he studied influences of logjams on stream insect emergence, and he remains interested in woody habitat. Before academia he had a career in fisheries with Minnesota DNR. His coauthored publications related to wood are in international journals including Water Resources Research, Freshwater Biology, and Geomorphology.

PRESENTATION TITLE, Large Woody Habitat

Josh Blankenheim, DNR 2:35 pm

Josh Blankenheim received his B.S. in Fisheries Science from the University of Wisconsin-Stevens Point and his M.S. in Fish Ecology from Michigan Technological University. Josh began his career with the Wisconsin DNR working on species ranging from bluegills to lake sturgeon. He has been with the Minnesota DNR stationed in Duluth for 7.5 years. Josh is involved in many aspects of fish management in Lake Superior, but works primarily with migratory species such as rainbow trout and brook trout. Recently he has worked closely with a number of angling groups on habitat projects within the Lake Superior watershed.

PRESENTATION TITLE, The Status of Migratory Fish Populations in North Shore Streams

Marty Rye, USFS 2:55 pm

Marty is a hydrologist and professional civil engineer with 25 years of experience in a variety of roles, settings, and responsibilities. He has degrees from the University of Minnesota in agricultural engineering (soil and water) and civil engineering (water resources).

He has always worked in the “gap” or intersection between the engineering and ecological fields. He has worked in a range of settings including agricultural, forested, and urban on resources that range from excellent to highly degraded systems. He has worked as a Hydrologist with the MnDNR, a consulting engineer, and for last 7 years as the SNF Forest Hydrologist.

PRESENTATION TITLE, Role of Beaver in Riverine Management

Deserae Hendrickson, DNR 3:35 pm

Deserae has worked for MN DNR in fisheries management for 23 years, including Lake City and Ortonville, with the last 12 years in Duluth.

Bachelors degree: University of Illinois in Ecology, Ethology and Evolution

Masters degree: University of Minnesota, Fisheries Management

PRESENTATION TITLE, Are Our Trout Comfortably Cold?

Jason Butcher, USFS 3:55 pm

Jason has worked on the Superior National Forest in Northeast Minnesota as an Aquatic Biologist since 2001. His work focuses on helping to manage the forest's vast aquatic resources through environmental assessments, monitoring and evaluating forest activities, and implementing projects that maintain or enhance the health of aquatic communities. Before his time with the Forest Service he worked as an aquatic research assistant for five years with the USGS at the Lake Michigan Ecological Research Station. Jason earned a Bachelor's degree in Environmental Science from Lake Superior State University and a Master's degree from Purdue University in Biology.

PRESENTATION TITLE, Managing Stream Connectivity on the Superior National Forest

Brad Hansen, UMN 4:15

Brad Hansen is a Senior Scientist at the University of Minnesota in the Department of Bioproducts and Biosystems Engineering. He has spent the last thirty three years working on a variety of research projects related to agriculture, hydrology and water quality. He has worked on a number of North Shore related projects including the Knife and Poplar river TMDL's.

PRESENTATION TITLE, Cross River Channel Survey: Present Day Effects of Historical Logging Structures

Day Two, January 8, 2014

John Nieber, UMN 8:30 am

A native of Upstate New York he received his B.S. degree in Forest Engineering at Syracuse University in 1972, his M.S. degree in Civil and Environmental Engineering at Cornell University in 1974, and his Ph.D. in Agricultural Engineering at Cornell University in 1979. He joined the Department of Agricultural Engineering at the University of Minnesota as an Associate Professor, and in 1995 and is now Full Professor in the department of Bioproducts and Biosystems Engineering. John's research interests involve hydrologic process discovery and modeling, and the study of flow and transport processes in porous media.

PRESENTATION TITLE, Effects of Forest Harvesting on Flows in the Cross River; a look with the HMS model

Tom Hollenhorst, EPA 8:50 am

Tom works as a landscape ecologist for the E.P.A in the Office of Research and Development, National Health and Environmental Effects Research Laboratory, Mid Continent Ecology Division here in Duluth, MN. He has a MS in Wildlife Management from West Virginia University. Tom applies GIS and remote sensing technology towards improved management and understanding of our natural resources. In particular he is interested mapping and understanding various properties and processes associated with watersheds and near shore habitats around the Great Lakes.

PRESENTATION TITLE, Assessing Cumulative Watershed Stressors: Using LIDAR to Assess the Amount of Open Lands and Young Forest Associated with In-Channel Erosion for North Shore Tributaries

George Host, NRRI 9:10 am

Dr. George Host is a Senior Research Associate and Landscape Ecologist at NRRI and Director of NRRI's Geographic Information System laboratory. His current research includes application of GIS-based spatial models, interactions between forests and aquatic systems, and large-scale landscape assessment. Areas of expertise include quantification of environmental stressors, spatial analysis, and visualization of complex data for scientific and public audiences. Dr. Host has served on advisory panels for the MN Dept of Natural Resources, the MN Forest Resources Council, and numerous county and municipal groups.

PRESENTATION TITLE, GIS Landscape and Watershed Stressors

Travis Dahl, USACE 9:30 am

Travis Dahl has ten years of experience as a hydraulic engineer with the U.S. Army Corps of Engineers' Detroit District. He has a B.S. from R.P.I., an M.S.E. in Environmental Engineering from the University of Michigan, and is currently working on his Ph.D. in Environmental Geosciences at Michigan State University. A large portion of his work with the Corps of Engineers involves looking at sediment issues ranging from local to watershed scales, including work in a number of Western Lake Superior watersheds. He is also involved in Great Lakes wide issues such as Lake Superior water level regulation.

PRESENTATION TITLE, Reducing Sediment Loads and Restoring Streams When Nature Controls (Most) of the Cards

Titus Seilheimer, WISG 9:50 am

Titus Seilheimer is the Fisheries Specialist for Wisconsin Sea Grant and based in Manitowoc, WI. He has Biology degrees from Lawrence University and McMaster University. Before joining Wisconsin Sea Grant in December 2012, Dr. Seilheimer developed water quality models for the Lake Superior and Lake Michigan watersheds (U.S. Forest Service). He has broad research experience on fish habitat and ecological indicators development in Great Lakes coastal wetlands (McMaster University), along with fish microhabitat use, river flow regime classification, and response of fish to altered flow regime in Oklahoma (Oklahoma State University and Cornell University).

PRESENTATION TITLE, Prioritizing Lake Superior Watersheds Using Forest Disturbance and Landscape Metrics

Gerald Niemi, NRRI 10:30 am

Dr. Gerald Niemi is Professor of Biology and a Senior Research Associate at the Center for Water and the Environment at the Natural Resources Research Institute at the University of Minnesota, Duluth. He was director of the Center for Water and the Environment of NRRI from 1998 to 2008. He received his Ph.D. at Florida State University and was a Fulbright scholar in Finland in the early 1980's. His primary research interests include birds, amphibians, Great Lakes ecosystems, conservation biology, landscape ecology, and sustainable natural resources development. Niemi has over 100 peer reviewed papers and over 100 technical reports. He has trained over 30 graduate students and was named the Outstanding Scientist of the Great Lakes in 2006-2007 by the International Joint Commission.

PRESENTATION TITLE, A Review of Forest Landscape and Riparian Disturbances to Stream Ecosystems

Brian Palik, USFS 10:50 am

Brian Palik is research ecologist and team leader with the US Forest Service-Northern Research Station, in Grand Rapids MN.

He has Ph.D. and M.S. degrees in forestry and plant ecology from Michigan State University and a B.S. from Alma College.

Dr. Palik and his research team and collaborators work broadly on questions related to the sustainability of forest management by studying ecosystem processes in natural ecosystems and their managed counterparts.

PRESENTATION TITLE, Hidden Watersheds: Understanding Seasonal Pools in a Landscape Context

Kristin Carlson, DNR 11:10 am

Kristin Carlson is a decision-support specialist for the Minnesota DNR. Her work focuses on conservation planning and prioritization within watersheds.

PRESENTATION TITLE, Using Zonation, a Value-Based Model, to Prioritize Areas For Watershed Management

Stephen Handler, USFS 11:30 am

Stephen Handler coordinates the Northwoods Climate Change Response Framework, focusing on the states of Minnesota and Michigan. He is involved in writing climate change vulnerability assessments, leading trainings and workshops, and launching forestry adaptation demonstration projects around the Northwoods. Learn more at www.forestadaptation.org. Before joining NIACS in 2011, Stephen worked in Montana for a small company on climate change consulting and forest carbon projects. **PRESENTATION TITLE, Climate Change Vulnerability of Forest Ecosystems in Northern Minnesota**

Mark White, TNC 11:50 am

Mark White is the Forest Ecologist for The Nature Conservancy in Minnesota and the Dakotas. Prior to joining TNC in 2004, Mark was a Senior Research Fellow at the University of Minnesota, Duluth's Natural Resources Research Institute. His work focuses on biodiversity conservation in the forested landscapes of northern Minnesota. This includes monitoring forest change, prescribed fire effects, ecological forestry, herbivore impacts on plant communities, invasive plants, and the implications of climate change for forest conservation and management.

PRESENTATION TITLE, Forest Restoration and Management in Changing Climate: Implications for Lake Superior Watersheds

Mark Seeley, UMN Keynote 1:00 pm

Dr. Mark Seeley, Extension Climatologist and Professor in the Department of Soil, Water, and Climate at the University of Minnesota

Mark Seeley joined the faculty of the Department of Soil, Water, and Climate at the University of Minnesota in 1978. Since that time he has been Extension Climatologist and Meteorologist managing the Weather and Climate Education Program. He has served as a weekly commentator on Minnesota Public Radio's "Morning Edition" news program and written the weekly newsletter "Minnesota WeatherTalk" since 1992. Dr. Seeley has helped Twin Cities Public Television (TPT) produce documentaries on Minnesota's most memorable weather events, edited two series of children's books about weather, authored Minnesota Weather Almanac (published by the Minnesota Historical Society Press in 2006), and co-authored (with Don Breneman) Voyageur Skies: Weather and the Wilderness in Minnesota's National Park (Afton Press, 2011), winner of the Northeast Minnesota Book Award in 2012.

PRESENTATION TITLE, Climate Trends and Climate Change in Our Own Backyard: A Review

Lucinda Johnson, NRRI 1:45 pm

Dr. Lucinda B. Johnson is Interim Director of the Natural Resources Research Institute and Director of the Center for Water and the Environment at the University of Minnesota. She is an aquatic and landscape ecologist with a PhD from Michigan State University (1999), BS from the State University of New York's College of Environmental Science and Forestry, and B.A. from Duke University. Dr. Johnson's research focuses on the impacts of multiple stressors on aquatic ecosystems with emphasis on human activities (e.g., land use) and climate change. Much of her work has involved quantifying interactions between terrestrial and aquatic ecosystems with a focus on aquatic endpoints (primarily amphibians, invertebrates, fish, and their habitats) in streams, wetlands, and coastal ecosystems of the Great Lakes. This work has resulted in the development of environmental indicators for assessing the condition of aquatic ecosystems, along with the development of spatial analysis tools for identifying reference and degraded conditions. The latter have proved useful for environmental assessment as well as conservation planning.

PRESENTATION TITLE, Effects of Climate Change on Distribution of Cold Water Fish in North Shore Streams.

Karen Gran, UMD 2:15 pm

Dr. Karen Gran is an Associate Professor in the Department of Geological Sciences at the University of Minnesota Duluth. She got her Ph.D. from the University of Washington, M.S. from the University of Minnesota, and B.A. from Carleton College. Her research focuses on fluvial geomorphology, including how channels evolve under changing conditions, from volcanic eruptions to land use changes.

PRESENTATION TITLE, Stream restoration: An evolving practice

Henry Eichman, USFS 2:35 pm

As an Economist for the Forest Service, Henry's job is to inform the public about their connections to resources and opportunities on public lands. Prior to work as an economist Henry studied at Colorado College and worked as a wildlife Technician for state and federal agencies. He began work as an economist for the Bureau of Land Management (BLM) after receiving an M.S. in Agriculture and Resource Economics at Oregon State University. After two years with the BLM he started with the Forest Service in 2007, and has since worked on over 60 natural resource related projects across the nation.

PRESENTATION TITLE, Economic Aspects of Stream Restoration

Symposium Planning Committee: Minnesota Department of Natural Resources, University of Minnesota Sea Grant, UMD Natural Resources Research Institute, Minnesota Pollution Control Agency, US Forest Service, US Environmental Protection Agency, Lake Superior Coldwater Coalition, Minnesota Trout Unlimited, and Laurentian Resource Conservation and Development Council

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