Speaker Biographies

Keynote Speaker: Mayor Jim Ginn is a producer in Huron County, operating a 60 head cow calf beef operation of purebred red angus. He farms 320 acres, and has no-tilled for 25 years. He has reforested 30 acres of land, planting 20 000 trees and also planted a tall grass prairie. Jim has used his expertise and enthusiasm for farm stewardship by assisting in the development of the Rural Landowners Stewardship Guide, the Woodlot Management BMP, and the Establishing Tree Cover BMP. He has served 12 years on the Huron Stewardship Council, and 18 years on the Huron Perth Woodlot Association. He is presently Chair of the Huron Clean Water Steering Committee, and current mayor of the Municipality of Central Huron. Jim won a national Countryside Canada award for stewardship in 2004, and a provincial award from the Ontario Cattlemen's Association in 2012.

Dr. Claire Baffaut holds an engineering degree from the School of Hydraulic Engineering in Grenoble, France and a PhD from Purdue University. She is currently a research hydrologist with the USDA-Agricultural Research Service (ARS) in the Cropping Systems and Water Quality Research Unit. Her research interests include modeling watershed and landscape processes, developing practical tools to identify areas that need particular attention, and developing alternative agricultural practices for improved watershed management under changing land use, climate, and economic constraints.

Elin Betanzo is project manager for Toward Sustainable Water Information, looking at the availability of water quality monitoring data to support decision making. Previously, Elin was the principal hydraulic engineer at the Washington Suburban Sanitary Commission serving the Maryland suburbs of Washington, DC, where she did master planning and water distribution system modeling. Prior to that, Elin spent several years at the US Environmental Protection Agency writing drinking water regulations and developing technical guidance. She also served as the National Tribal Drinking Water Coordinator at EPA, assisting with implementation of Safe Drinking Water Act requirements at tribal water systems. Elin earned her Master of Science in Environmental Engineering from Virginia Tech, a Bachelor of Science in Environmental Science and a Bachelor of Fine Arts in Piano Performance from Carnegie Mellon University. Elin is a Professional Engineer and a certified water system operator.

Dave Bray has 30 years of experience in resource management and environmental management, 25 of those years in the provincial government, including the ministries of Natural Resources, Environment and Agriculture & Food. Early in his career, Dave specialized in private-land forestry extension with agricultural land owners in south-western Ontario, developing forestry prescriptions and planting projects for the retirement of fragile agricultural lands and the protection of cold water fisheries. After continuing his education and training in the early 1990s, Dave used his skills as a GIS Application Specialist to help implement the Natural Resources and Values Inventory System with MNR and to manage OMAF's digital soils and drainage databases. With the introduction of Ontario's Nutrient Management Act in 2003, Dave took on a compliance role with OMAF and MOE, helping agricultural producers and land-application businesses comply with the nutrient management requirements. Dave is currently an Environmental Specialist with OMAF and is working with Conservation Authorities and agricultural stakeholders to build resilience to extreme weather events and to develop risk assessment tools to assist farmers assess the risk of climate change to their operations. Dave and his family continue to farm in North Perth, Ontario.

Luca Cargnelli has worked in the Lake Erie basin since 1999, with the Ontario Ministry of Natural Resources and, most recently, with Environment Canada. Since 2004 his work has focussed on developing and implementing Remedial Action Plans in the Wheatley Harbour, Detroit River and St. Clair River AOCs, and coordinating and implementing the Lake Erie Lakewide Action and Management Plan (LAMP). Currently, he is the Lake Erie lead within Environment Canada's LAMP Program and he co-chairs the Lake St. Clair Canadian Watershed Coordination Council.

Dr. Remegio Confesor Jr. earned his Ph.D. in Agricultural and Biological Engineering from the Pennsylvania State University in 2004. He is currently a research scientist at the National Center for Water Quality Research (NCWQR), Heidelberg University. Prior to joining Heidelberg University, he was a post-doctoral research associate at Oregon State University and collaborated with the USDA-ARS in the Comprehensive Effects Assessment Project (CEAP). His research interests include watershed modeling, Pareto optimization, Automatic parameter estimation, Runoff and sediment transport processes, Nitrogen and Phosphorus movement, Soil-water-plant relationships. He is also actively involved as a steering committee member of the Sandusky River Watershed Coalition, a grassroots group dedicated to the protection and enhancement of water resources in the Sandusky watershed in Ohio.

Eric Cooley grew up in Sturgeon Bay and Deforest, Wisconsin. He earned undergraduate degrees in nuclear engineering from Thomas Edison State College and soil and water conservation from UW-Madison and a master's degree in soil physics from UW-Madison. Eric started work for Discovery Farms in December 2004 as an outreach specialist and is currently the research coordinator. He also served a 6-year enlistment in the U.S. Navy as a nuclear reactor operator and water chemist. He was previously employed by the Door County Soil and Water Conservation Department, where he specialized in nutrient management planning.

Dr. Brady Deaton, Jr. is an Associate Professor in the Department of Food, Agriculture and Resource at the University of Guelph. His research focuses on two key themes: land and property, and food and agricultural standards. He currently directs the Greenbelt Project; its mission is to support the independent study of the economic effects of Ontario's recently enacted Greenbelt. He received his Ph.D. in Agricultural Economics from Michigan State University in 2002, and worked as a Post-Doctoral associate from 2002 to 2004 at the Institute for Food and Agricultural Standards at Michigan State University.

Gabrielle Ferguson has over 25 years of agronomic experience. She has worked with Cyanamid, Cargill, Pioneer Hi-Bred, Agri-trend, Agriculture and Agri-food Canada and the University of Guelph. Her role has alternated between extension advisor for 15 years and private agronomic consultant and researcher for 13 years. She has sat on the board of directors of many farm organizations. She is presently an environmental program specialist responsible for the best management practices verification and demonstration program and the watershed based BMP effectiveness projects.

Sandra George's career with the federal public service has spanned 30 years. She is currently working with Environment Canada as the program lead on nutrient issues in the Great Lakes. Her responsibilities include the coordination of the implementation of the Government of Canada's nutrient related commitments under the recently revised Great Lakes Water Quality Agreement and the upcoming Canada-Ontario Agreement. She is also responsible for the implementation of the government's Great Lakes

Nutrient Initiative. Previously Sandra worked for Environment Canada as the Lake Erie Lakewide Management Program co-chair and with Fisheries and Oceans as a fisheries biologist with their fish habitat and acid rain programs.

Chitra Gowda is the Water Quality Specialist at the Essex Region Conservation Authority. She holds a Bachelor in Environmental Engineering degree from India, and a Master in Environmental Engineering degree from the University of Windsor. Chitra has more than 11 years experience in environmental science and engineering projects, working in consultancy firms, conservation authorities and the University of Windsor, focusing mainly on source water protection technical studies and planning as well as water quality improvement best management practices. Her recent projects include setting up a water control structure to study P movement in managed tile drains in Essex, Ontario, and the design and creation of a rain garden for stormwater management in Harrow, Ontario.

Donald King, MSc, CCA-ON. Don is a Research Agronomist with the Soil Resource Group in Guelph. SRG is a resource management-consulting firm conducting applied research in the agricultural and environmental sectors and providing land resource services to government agencies and landowners. As a senior member of SRG, he conducts on-farm research projects to evaluate the environmental impact of agricultural production to help determine improved farming practices.

Dr. Kevin King is a lead scientist and Research Agricultural Engineer with USDA-ARS. Dr. King received his undergraduate and master's degree in agricultural engineering from Purdue University. His doctorate degree is in civil engineering with a specialty in water resources from Texas A&M University. Dr. King is an expert in watershed and edge-of-field scale data collection and land management assessment. Dr. King's current research is focused on the watershed and edge-of-field surface and subsurface (tile) hydrologic and water quality responses of implementing agricultural best management practices. His current research spans the Upper Big Walnut Creek watershed, Grand Lake St. Mary watershed, and Western Lake Erie Basin watersheds in Ohio.

Dr. David Lobb is the Senior Research Chair of the Watershed Systems Research Program at the University of Manitoba, and in that position he is tasked with reducing phosphorus loading to Lake Winnipeg, the 10th largest in the world and currently topping the list for the most threatened lake in the world. Prior to his position at the University of Manitoba, Lobb worked at the Eastern Canada Soil and Water Conservation Centre based at the University of Moncton, and at the Centre for Soil and Water Conservation at the University of Guelph where he received his MSc and PhD. Lobb is an international expert in soil erosion and sedimentation processes, control and modelling. His research has been carried out in fields and watersheds across Canada and several other countries around the world.

Dr. K. Bruce MacDonald is an Ontario native with degrees from the universities of Guelph and Toronto. He has spent many years as a research scientist working for Agriculture and Agri-Food Canada on the development of the Canada Soil Information System and its application. During his time as head of the Ontario Land Resource Unit in Guelph he participated in a bi-national program to develop an 'Agricultural Profile for the Great Lakes Basin' and he worked on the development of Agri-environmental Indicators related to water quality. Since AAFC, he has worked as a consultant on a wide range of projects dealing with agriculture and the environment, most recently, two projects in support of the Great Lakes Nutrient Initiatives program of Environment Canada. The projects dealt with 'Agricultural Phosphorus Management BMPs and their Resilience to Climate Change' and the 'Feasibility of Conducting a CEAP Type Assessment for the Ontario Lake Erie Great Lakes Basin'.

Dr. Merrin Macrae is an Associate Professor in the Department of Geography and Environmental Management at the University of Waterloo. Her research interests' center around the effects of variable hydrologic conditions on biogeochemical (nitrogen, phosphorus) transport in agricultural landscapes. Types of hydrologic change include artificial drainage (i.e. tile drains) and climatic variability (e.g. seasonality, different types of storms). Her current research is focussed in three theme areas: (1) spatio-temporal patterns in hydrologic and nutrient export from agricultural catchments, with an emphasis on the influence of antecedent moisture conditions on stormflow chemistry; (2) evaluating seasonal patterns in nutrient cycling and transport; and (3) determining the effects of tillage/no-till on nutrient transport in drainage tiles.

Margaret May, an experienced facilitator for farm groups, brings a wealth of knowledge and enthusiasm to OSCIA. Margaret was raised on a beef and cash crop operation, and is actively involved in the community with 4-H. She has been a 4-H leader for 30 years--beef, sheep and judging clubs for young people aged 9-21. Leadership, Public speaking, livestock showing, care and feeding of livestock all involved. Over the last 20 years, Margaret has assisted local producers with their environment and farm business plans and programs.

Kevin McKague, P.Eng, CPESC, is an Agricultural Engineer with the Ontario Ministry of Agriculture and Food/Ministry of Rural Affairs, based out of Woodstock, Ontario. His work experience since 1984 within Conservation Authorities, the private sector and, the last 12 years with OMAF/MRA, has focused largely on aspects of rural soil and water conservation and management. He has been involved in numerous rural non-point source studies, modeling projects and BMP implementation efforts in that time. For the WBBE (Watershed Based BMP Evaluation) project, he was part of the technical advisory committee and assisted the team in converting the observations and practices made and followed in the field into appropriate model input.

Don Meals has 35 years of experience in agricultural nonpoint source pollution, at the University of Vermont, the state of Vermont, and as a consultant assisting USDA and USEPA in evaluating nonpoint source programs across the U.S. His primary interest and expertise is in evaluating the effectiveness of management practices on water quality through monitoring at the field and watershed scale. He has worked throughout the United States on nps issues, focusing on evaluation of watershed-scale response to changes in agricultural management and in documenting lessons learned from federal agricultural water quality programs.

Karthik Nadella is currently pursuing a Master's degree in the Department of Food, Agriculture and Resource Economics at the University of Guelph. His research is primarily focused on land issues and more specifically, the structure and consequences of agricultural rental contracts in Canada. He has previously worked at the United Nations University – Institute for Water, Environment and Health (UNU-INWEH) where he undertook a project to measure the costs associated with land degradation in the developing world. He graduated from Queen's University (B.Sc.) with a Major in Biology and a Minor in Economics. He received a major in Economics from McMaster University.

Dr. Ivan O'Halloran current research efforts have been primarily focused on the impact of agricultural practices on nitrogen and phosphorus in agro-ecosystems and potential losses of these nutrients to surface and ground water. He serves on the Lake Simcoe Science Committee responsible for reporting/advising on the ecological status of that lake and its watershed. He was the Research coordinator of the Nutrient Management Joint Research Program and submitted a Land Applications Options report

pertaining to manure and biosolid utilization to the Ontario Ministries of Agriculture and Environment in 2010. He has also had considerable experience studying the spatial variability of crop yields, soil properties and fertilizer requirements in attempts to devise better methods for managing crop inputs.

Don Pearson joined the Lower Thames Valley Conservation Authority on January 1, 2013 following nearly 8 years as General Manager of Conservation Ontario, the umbrella organization of Ontario's 36 Conservation Authorities. He a member of the Boards of Ontario Heritage Trust and the Canadian Water Network; and has been a member of the Ontario Biodiversity Council and Trees Ontario since 2005.From 1981 until 2003, Mr. Pearson was General Manager of the Upper Thames River Conservation Authority, where under his leadership the Authority earned a reputation for excellence and innovation in environmental management and community engagement. The Thames was designated as a Canadian Heritage River in 2000 with the strong support of the Upper Thames River and Lower Thames Valley Conservation Authorities. Prior to joining Conservation Ontario, Don spent two years as Chief Administrative Officer of the County of Perth. He holds a Master's Degree in Public Administration from the University of Western Ontario and an Honours Science Degree from the University of Waterloo.

Dr. Ramesh Rudra has graduated with both M.Sc. and Ph.D. in soil and water engineering from the Pennsylvania State University. His long term research interests has been the mechanics and modelling of drainable water quality including mechanics and modelling of soil erosion, sediment and nutrient transport, subsurface drainage and hydrological processes, development of field and watershed models tools and approaches for soil and water conservation. He is part of a small team that introduced the application of modeling approaches for nonpoint source pollution management in Ontario during PLUARG period. This team has also introduced the application of other models in Ontario including CREAMS, GLEAMS, DRAINMOD, RZWQM, SWAT, AGNPS, AnnAGNPS, ANSWERS and ANSWERS2000. The models developed by this team include (GAMES/GAMESP), GDVFS (Guelph Tool for Design and Evaluation of Filter Strips). Present research includes development of approaches for evaluation of BMPS's, Variable Source Area (VSA) modelling, change in winter hydrologic regimes and their impact on agricultural water management.

Dr. Chin Tan, Ph.D. is a senior Research Scientist at the Agriculture & Agri-Food Canada at Harrow, Ontario. His primary area of research is agriculture water management and water quality. He has involved several large projects related to climate change, water quality, quantity, environmental sustainability and crop production systems. He has designed the controlled drainage/sub-irrigation and water recycling systems, which significantly improve both crop productivity and water quality, as well as designing innovative water quantity and quality data acquisition systems to improve methodologies for quantifying water and nutrient use efficiency. He has demonstrated substantial scientific leadership through his role as scientific authority on a wide range of externally funded projects, supervision of postdoctoral fellows, visiting scientists and appointments to provincial research, planning and expert. He has authored and co-authored over 133 peer-reviewed scientific publications/book chapters and over 400 technical reports/scientific presentations.

Mari Veliz has coordinated the Healthy Watersheds program at the Ausable Bayfield Conservation Authority (ABCA) since 2002. The ABCA is a watershed management agency with a jurisdiction of 2400 km2 along the south east shore of Lake Huron. The Healthy Watersheds program is comprised of a water quality and bio-monitoring program and also provides local community groups and federal and provincial agencies with ongoing support to improve local waterways. Ms. Veliz has a Bachelor of

Environmental Studies from the University of Waterloo and a Masters of Science from the University of Alberta. Most recently, Ms. Veliz has led a multi-disciplinary team of researchers and extension providers in a best management practices verification project in Huron County.

Dr. Wanhong Yang is a professor in the Department of Geography, University of Guelph. Dr. Yang has developed a research program on examining the cost effectiveness of agricultural conservation programs using integrated economic, hydrologic, and GIS modelling. Dr. Yang has been leading the South Tobacco Creek watershed modelling for Watershed Evaluation of BMPs (WEBs) program in Agriculture and Agri-Food Canada since 2005. Dr. Yang has also been leading the Gully Creek watershed modelling for Watershed Based BMP Evaluation (WBBE) program in Ontario Ministry of Agriculture and Food since 2011.

Dr. Tiequan (T.Q.) Zhang is a Senior Research Scientist with Agriculture and Agri-Food Canada and an Adjunct Professor in the University of Guelph and University of Windsor. His research has focussed on soil chemistry and fertility management, with specification on agronomic and water quality assessment of both organic and inorganic fertilizers in various cropping systems. This includes research on bio-availability of nutrients from organic wastes; agronomic values of soil residual phosphorus (P); transformation and transportation pathways of soil P and their relationships with losses to water resource, and development of BMPs for management and tools for risk assessment. With supports from "OMAFRA and MOE Joint Research Program on Nutrient Management" and "Lake Simcoe Clean-up Funds", he lead his teams and developed Soil P Environmental Test Methods for both mineral and organic soils in Ontario. He lead and edited a special issue of Canadian Journal of Soil Science, "Mitigation Phosphorus Loss from Agriculture", and serves as an Associate Editor for the Journal of Environmental Quality.

Masters of Ceremony and Moderators

Masters of Ceremony

Jacqui Laporte is an Environmental Specialist with OMAF/MRA. She is the local representative on the Healthy Lake Huron initiative, assisting Conservation Authorities and community groups with planning and implementation of watershed-based initiatives. She is leading a social media initiative for Environmental Management Branch, to raise awareness and conversation about research initiatives and priorities in the province. She was actively involved in the development of the new Environmental Farm Plan program, and was the technical lead for several Counties in the past 10 years. Jacqui was formerly the Manager of the Compliance Unit for nutrient management for OMAF, and project manager for the development of new on-farm regulations and enforcement initiatives. She was also an Environmental Officer for the Ministry of the Environment. She is a graduate of the Fleming College School of Natural Resources, and will soon graduate from Athabasca University in Law, Governance and Management.

Brian McDougall is the General Manager of the St. Clair Region Conservation Authority. Has worked at the SCRCA for over 23 years, becoming General Manager in 2011. He has held the senior position of Director of Watershed Services, directing a number of departments including Conservation Services, Flood and Erosion Control and Biological Research. Brian has led shoreline restoration projects, implemented watershed flood forecasting services and developed a watershed management plan for an area of concern in the St. Clair river watershed.

Moderators

Gabrielle Ferguson has over 25 years of agronomic experience. She has worked with Cyanamid, Cargill, Pioneer Hi-Bred, Agri-trend, Agriculture and Agri-food Canada and the University of Guelph. Her role has alternated between extension advisor for 15 years and private agronomic consultant and researcher for 13 years. She has sat on the board of directors of many farm organizations. She is presently an environmental program specialist responsible for the best management practices verification and demonstration program and the watershed based BMP effectiveness projects.

Darryl Finnigan has worked as a Policy and Program Analyst for the Ontario Ministry of Agriculture, Food & Rural Affairs (OMAFRA) in Guelph, Ontario since 2005. He is currently working on the OMAFRA Lake Simcoe Program and trying to find better ways to assess the performance of agri-environmental programs. Prior to joining OMAFRA, Darryl worked as a biologist examining pesticides for Health Canada in Ottawa, and as a consultant for environmental groups in Toronto. Darryl received his Bachelor of Science in Agriculture from Guelph in 1995 and his Masters of Natural Resource Management from Simon Fraser University in 2003.

Chitra Gowda is the Water Quality Specialist at the Essex Region Conservation Authority. She holds a Bachelor in Environmental Engineering degree from India, and a Master in Environmental Engineering degree from the University of Windsor. Chitra has more than 11 years experience in environmental science and engineering projects, working in consultancy firms, conservation authorities and the University of Windsor, focusing mainly on source water protection technical studies and planning as well as water quality improvement best management practices. Her recent projects include setting up a water control structure to study P movement in managed tile drains in Essex, Ontario, and the design and creation of a rain garden for stormwater management in Harrow, Ontario.

Jackie McCall works for the Ministry of Agriculture and Food as a Program Analyst, developing programs to help the ag sector with environmental risk management. Jackie has worked for the ministry for about 10 years now – where does the time go! Prior to that she worked in watershed management in Calgary and Northern Ontario. She has a master's degree in Environmental Studies from University of Waterloo. Jackie lives on a farm north of Guelph and keeps bees as a hobby, to take the sting out of work.