

## Great Lakes Observing System 2010 Board of Directors Bios

### **Mark J. Burrows**

Mr. Burrows is a Physical Scientist at the International Joint Commission (IJC)'s Great Lakes Regional Office in Windsor, Ontario. He has served as IJC's Secretary of the Council of Great Lakes Research Managers (CGLRM) since 2000. The CGLRM advises the IJC on Great Lakes research issues and fosters collaboration and communications among Great Lakes research institutions. He coordinates Council activities focusing on issues related to the Great Lakes Water Quality Agreement, manages the Great Lakes – St. Lawrence Research Inventory, and the Great Lakes Association of Science Ships database. Prior to working with the IJC, Mr. Burrows served in the U.S. Coast Guard for over twenty years in variety of assignments with a focus on commercial vessel safety, environmental protection and spill response. He holds an MSE in Naval Architecture and Marine Engineering from the University of Michigan and a BS in Marine Science from the United States Coast Guard Academy.

### **Murray Charlton, *nominee***

Murray Charlton is a former Research Scientist and Emeritus Associate with Environment Canada. The International Association for Great Lakes Research (IAGLR) presented him with its IAGLR Lifetime Achievement Award at its 2009 annual Conference on Great Lakes Research. Murray's work has made key and lasting contributions to Great Lakes science through 40 years of dedicated research and service. His research has been key to our understanding of lake eutrophication, contaminant cycling, oxygen and carbon balances in lakes, shoreline algae, taste and odor problems and sediment dynamics; he has over 100 scientific publications to his credit. During his career and since his retirement in 2007, he has provided authoritative advice on environmental issues to Environment Canada's Senior Management, binational Lakewide Management Plan committees, Remedial Action Plan committees and the International Joint Committee (IJC). In this way, he has guided policy decisions that have been effective in changing human behavior and ultimately improving the quality of our Great Lakes. In 2005, the IJC awarded Murray the Biennial Award for Great Lakes Science for outstanding research and leadership dedicated to restoring the health of the Great Lakes. Also in 2005, Environment Canada awarded him the Departmental Citation of Excellence for his cumulative achievements.

### **Dr. Gail Krantzberg**

Dr. Krantzberg is Professor and Director of the Centre for Engineering and Public Policy in the School of Engineering at McMaster University. The Centre offers a Master's Degree to engineers and applied scientist training them on complex environmental matters and enabling them to understand the application of science and technology to public policy. Gail completed her M.Sc. and Ph.D. at the University of Toronto in the fields of ecology, biology, chemistry and toxicology, studying how contaminants cycling in freshwaters and their ecological effects. She worked for the Ontario Ministry of Environment from 1988 to 2001, as Sediment Specialist, Coordinator of Great Lakes Programs, and Senior Policy Advisor on Great Lakes. She is the past president of the International Association of Great Lakes Research. Dr. Krantzberg was the Director of the Great Lakes Regional Office of the International Joint Commission from 2001 to 2005, after having served on this binational treaty organization's Water Quality Board, Council of Great Lakes Research Managers, Sediment Priority Action Committee and Indicators Implementation Task Force. The IJC's Regional Office plays a central role of overseeing binational progress in Great Lakes clean up and protection under the auspices of the 1972 Great Lakes Water Quality Agreement. She has authored more than 90 scientific and policy articles on issues pertaining to ecosystem quality and is a frequent speaker to media and the public.

### **Frank Kudrna, P.E.**

Dr. Kudrna became President of Kudrna & Associates, Ltd. in March, 1986 and, since 1998, serves as the Chief Executive Officer. The firm, with offices in Chicago and DuPage County, provides diversified consulting

engineering services in the areas of civil engineering to industrial, commercial and institutional clients including municipal, state and federal agencies. He served as President and Chief Operating Officer of Epstein Civil Engineering, Inc. from July 1982 through March 1986. As Director of the Illinois Division of Water Resources from November, 1977 to June, 1982, he coordinated the water resource activities of the State of Illinois. He directed a staff of 160 with an annual budget of \$19 million and also chaired the Governor's State Water Plan Task Force. He spent nine years with the Metropolitan Water Reclamation District of Greater Chicago and during that period directed the Planning and Flood Control staffs. Prior to this he spent five years with the Illinois Division of Highways. Dr. Kudrna is a registered Professional Engineer in the States of Illinois, California, Wisconsin, New York, Indiana, Michigan and Florida. Kudrna served as Chairman of the Illinois Delegation of the Great Lakes Commission where he was a Commissioner for 25 years. He served as a U. S. Board Member of the International Joint Commission, Great Lakes Diversions and Consumptive Uses Study Board and the International Great Lakes Levels Advisory Board. Kudrna has also served on the U. S. Department of Commerce, Sea Grant National Advisory Panel, currently serves on NOAA's Science Advisory Board, and is a member of the Editorial Board of Seaway Review Magazine.

### **G. Tracy Mehan**

G. Tracy Mehan, III, is Principal with The Cadmus Group, Inc., an environmental consulting firm. Presently, Mehan serves on the Water Science and Technology Board and the Committee on the Mississippi River and the Clean Water Act for the National Research Council of the National Academies. Mehan is an Adjunct Professor in Environmental Law at George Mason University School of Law. He is a member of the Water Environment Federation, the Environmental Law Institute, and the Board of Directors of the Potomac Conservancy.

Over the past 20 years, Mehan has held numerous offices and appointments in public service. In 2006, he served as an independent expert judge for the Municipal Water Conservation Achievement Award Program sponsored by the U.S. Conference of Mayors and its Urban Water Council. He served as Environmental Stewardship Counselor to the 2004 G-8 Summit Planning Organization (2004). From 2001-2003, he served as Assistant Administrator for Water at the U.S. Environmental Protection Agency. Prior to that, Mr. Mehan served as director of the Michigan Office of the Great Lakes and a member of then Governor John Engler's Cabinet (1993-2001). He also was Michigan's representative on the Great Lakes Commission and the Water Quality Board of the International Joint Commission established under the Boundary Waters Treaty of 1909 between the U.S. and Canada. In addition, he chaired the Michigan Mercury Pollution Prevention Task Force. Mr. Mehan briefly served as Associate Deputy Administrator of EPA in 1992. Prior to that, he served as director of the Missouri Department of Natural Resources and member of the Cabinet of then Governor John Ashcroft from 1989 to 1992. Mehan is a graduate of Saint Louis University and its School of Law. He is the recipient of the 2004 Environment Award from the Association of Metropolitan Sewerage Agencies (AMSA) and the 2003 Elizabeth Jester Fellows Environmental Partnership Award from the Association of State & Interstate Water Pollution Control Administrators (ASWIPCA).

### **Dale Phenicie**

Phenicie has worked with industrial organizations on environmental matters during his entire working career. He has identified pollutant release sources, been involved in the development of effluent and air emission control systems, overseen control measure implementation, worked on new industrial process designs which reduce or eliminate environmental impacts, and actively monitored the results of these efforts in plant effluents, air emission streams and the ecosystem. Phenicie has been involved in Great Lakes related environmental issues since 1991. He served on a U.S. EPA task force regarding the Great Lakes Initiative (GLLI), the IJC Virtual Elimination Task Force, has organized and chaired several industry oriented committees and working groups on Great Lakes matters, coordinated industry activity in the Great Lakes Binational Toxics Strategy, and has been a member of the SOLEC Steering Committee since 1994. Since 1996, Dale has pursued an independent consulting practice primarily focused on Great Lakes issues. A primary client has been the Council of Great Lakes Industries. His industrial expertise includes pulp and paper making processes, lumber

and wood products production, chemical manufacture, and hydroelectric and thermal electric generating systems. He holds degrees in Industrial Chemistry Technology and Paper Technology from Ferris State University and Western Michigan University respectively.

### **Don Scavia, *nominee***

Don is a professor at the University of Michigan (UM), Director of the Graham Environmental Sustainability Institute, and Special Counsel for Sustainability to the UM President. At UM he also serves on the Executive Committee for the Erb Institute for Global Sustainable Enterprise, the Center for Advancing Research Solutions for Society, and the Michigan Memorial Phoenix Energy Institute. He was the director of Michigan Sea Grant from 2004-2009, SNRE Associate Dean for Research from 2004-2006, Director of the Cooperative Institute for Limnology and Ecosystems Research from 2004-2007, served on the Boards of Directors for the American Society of Limnology and Oceanography and the International Association for Great Lakes Research, and the Science Committee of NSF's Collaborative Large-scale Engineering Network for Environmental Research program. Prior to joining the Michigan faculty, as Chief Scientist of NOAA's National Ocean Service, Scavia was responsible for the quality, integrity, and responsiveness of NOS's science programs, and for ensuring that NOS's operations and resource management were based on solid science and technology. Before becoming the NOS Chief Scientist, he was Director of the National Centers for Coastal Ocean Science and Director of NOAA's Coastal Ocean Program, where he managed coastal and Great Lakes research programs in NOS laboratories, monitoring and assessment offices, and extramural research.

### **Dr. Harvey Shear**

Shear is currently an adjunct professor in the Department of Geography at the University of Toronto at Mississauga, teaching undergraduate courses on world freshwater resources and ecology / economy and is developing a course on the Great Lakes. Shear is Canadian Chair of the International Joint Commission's (IJC) Council of Great Lakes Research Managers. His previous position as Regional Science Advisor for Environment Canada-Ontario Region involved providing scientific advice on all environmental issues from Point Pelee in Lake Erie to Hudson Bay in Ontario. Shear has served as Canadian Chair of the Biennial State of the Lakes Ecosystem Conference (SOLEC) with U.S. EPA. He's held previous positions with the Department of Fisheries and Oceans and the IJC Regional Office. These involved development of biological monitoring programs, an intensive monitoring program for Lake Superior, establishment of a habitat management program for DFO in Ontario, and the land mark Pollution from Land Use Activities Reference Group (PLUARG) amongst other achievements. Dr. Shear has published numerous scientific papers on aquatic ecology and management, and has presented scientific talks at various scientific and non-scientific venues. He has also published several papers on the nutrient regime and pollution problems in Lake Chapala, Mexico's largest lake. He is actively involved in research on another Mexican lake, including the development of a basin wide management plan for this lake through extensive public consultation.

### **Nelson Thomas**

Nelson retired from US EPA in 1997. He worked on water quality issues with EPA for 36 years and, before that, with the State of Ohio as limnologist on Lake Erie. Thomas developed the phosphorus reduction plan to control Lake Erie's oxygen problems. Thomas directed the EPA Great Lakes Laboratory at Grosse Ile Michigan, and served as Associate Director for Research Operations-Environmental Research Laboratory Duluth and Senior Advisor for National Programs. He was the Lake Ontario co-chair of biology for the International Field Year Great Lakes (IFYGL), Co-chair Biology for the IJC's Lakes Huron and Superior Upper Lakes Reference Study, and served as Chair of the IJC Great Lakes Research Managers. He is currently a member of Minnesota Sea Grant Program Advisory Committee. Recently, term appointment ended as chair of the Duluth/Northshore Sewer District. Nelson sailed and raced sailboats for 30 years on three of the Great Lakes. He has authored and coauthored approximately 30 scientific papers dealing with Great Lakes water quality problems.

**David Ullrich, *nominee***

David Ullrich is the Executive Director of the Great Lakes and St. Lawrence Cities Initiative. He works with U.S. and Canadian mayors from across the Great Lakes and St. Lawrence Basin to advance the protection and restoration of the resource. Prior to assuming his current position, Ullrich served for thirty years at the U.S. Environmental Protection Agency's Great Lakes regional office in Chicago, working on environmental issues in the six states of the upper Midwest. He worked in many capacities over the years, including Acting Regional Administrator, Deputy Regional Administrator, Waste Management Division Director, Deputy Regional Counsel, Air Enforcement Chief, and Water Enforcement Attorney. For six years, he was the U.S. Chair of the Water Quality Board for the International Joint Commission, and was a founding member and chair of the Midwest Natural Resources Group. He continues to serve on the Water Quality Board, and in 2006 was appointed by the President to the Great Lakes Fishery Commission where he serves as U.S. Section Chair. In 1986, he completed a six month executive exchange assignment with the German Interior Ministry. U.S. EPA recognized Ullrich for a number of his accomplishments during his public service career.

**Bill Werick**

Werick worked for the Corps of Engineers from 1968 until his retirement in April 2004. During that time he worked on the Great Lakes as a surveyor and dredging specialist, as a planner for the Buffalo district, on special assignments throughout the U.S., and for the last fourteen years, as a senior planner at the Corps' Institute for Water Resources near Washington, D.C. He has spoken on water resources at Yale, Harvard, Johns Hopkins, Cornell, the University of Washington, the World Bank, United Nations, and the National Academy of Sciences. He provided expert opinion on water management to the White House Council on Environmental Quality and Congressional subcommittee staff interested in water issues, and has been interviewed on a variety of radio talk shows about water issues. Werick is an expert on drought management, one of the principal analysts for the National Drought Policy Commission (1999-2000), and manager of the National Drought Study for the Corps from 1989 to 1993. During that study, he led the development of Shared Vision Planning which he recently applied in two studies by Canada and the U.S. to find better ways to manage Lake Ontario levels and the Upper Great Lakes. Werick demonstrated the shared vision planning approach for the Middle East Peace process negotiations in Washington in September 1993, and was the U.S. representative to a water loss reduction conference held in Netanya, Israel in 1996 as part of the multilateral peace talks. Werick holds degrees in mathematics from Canisius College and civil engineering degree from the State University of New York at Buffalo, He is a registered engineer in New York State, and is a graduate of the Corps Planning Associates program.

**Dr. Jennifer Read, Executive Director**

Jennifer Read was appointed as the first executive director of GLOS on Aug. 27, 2008. Read holds a Ph.D. from the University of Western Ontario, where her research interests focused on the scientific and policy aspects of binational water policy in the context of the U.S.- Canada Great Lakes Water Quality Agreement. Over the last 15 years, she has held increasingly responsible positions in Great Lakes research, policy development and education/ outreach. Prior to her appointment at Michigan Sea Grant in 2001, Dr. Read was a research associate at the Great Lakes Institute for Environmental Research, University of Windsor; and a program specialist at the Great Lakes Commission. Read was a Fulbright Doctoral Fellow at the University of Michigan in 1998 and has multiple publications to her credit.