

Revised October 2017

CAREER OBJECTIVE:

To contribute to the renewal, protection and sustainability of natural and cultural heritage features locally, regionally and globally by advancing the bond between science, policy, and society.

To be a recognized leader in environmental renewal through innovative partnerships and strategic linkages among environment, economic, and social systems.

To ensure that environmental vitality remains on the societal and political agenda by clearly articulating and evaluating ecosystem-based policies and programs.

CURRENT OCCUPATION:

- Engineering and Public Policy Program, Booth School of Engineering Practice and Technology, McMaster University
- Associate Faculty Member, Geography and Earth Sciences, McMaster University
- Associate Faculty Member, Political Science, McMaster University
- Adjunct Professor, UNU INWEH, Hamilton Ontario;
- Adjunct Professor, Royal Rhodes University, BC.

PREVIOUS POSITIONS:

- Director, Great Lakes Regional Office, International Joint Commission. Windsor, Ontario.
- Ontario Ministry of Environment
 - Senior Policy Advisor
 - Great Lakes Strategic Policy Advisor
 - Remedial Action Plan Program Coordinator
 - Collingwood Harbour Remedial Action Plan Coordinator
 - Sediment Specialist/Ecotoxicologist

ACADEMIC POSITIONS

Professor, McMaster University, Engineering and Public Policy Program (2005-ongoing)

Associate Faculty Member, Geography and Earth Sciences, McMaster University (2009 - ongoing)

Associate Faculty Member, Political Science, McMaster University (2017 - ongoing)

Adjunct Professor, UNU INWEH, Hamilton Ontario. 2007- ongoing

Associate Faculty Member, University of Toronto, Institute for Environmental Studies (1988- 2003)

- Curriculum development and delivery for courses on Aquatic Pollution to students in the joint M.E.S./M.Sc. Masters' program from botany, zoology, geography, engineering, planning, anthropology, and other disciplines
- Served on numerous graduate supervisory teams as advisor on ecotoxicology, limnology, and environmental management

Adjunct Professor, Royal Roads University, Faculty of Social and Applied Science, Office of Interdisciplinary Studies (2010 - ongoing)

Associate Faculty Member, York University, Faculty of Environmental Studies (1992 – 2001)

- Curriculum development and delivery for courses on Restoration Ecology to students in the Masters' program from biology, land use planning, sociology, political science, engineering, and other disciplines
- Served on graduate supervisory teams as advisor on restoration ecology, and interjurisdictional environmental management

Affiliate, George Brown College, Toronto (2003- 2006)

- Curriculum development for undergraduate core course program in aquatic chemistry and site remediation for the College's new Environmental Engineering Diploma program.

GRADUATE SUPERVISION

- Masters of Engineering and Public Policy: 104 graduates, 16 on-going
- Ph.D. four Graduates, four on-going, two more to start in 2017

DEGREES

- Postdoctoral Fellowship, Ontario Ministry of Environment/University of Toronto, 1988.
- Ph.D. University of Toronto, 1987.
- M.Sc./M.E.S., University of Toronto, 1981.
- B. Sc., Honours Biology, University Scholar, McGill University, Montreal, Que'79.

AWARDS

2017 Canadian Who's Who, 2017. Grey House Publishing Canada

- 2015 Ontario Volunteer Service Awards, Government of Ontario
- 2007 MacGreen Environmental Award Recipient
- 2007 Woman of the Year, American Biographical Institute
- 1998 Amethyst Award for excellence in public service, Province of Ontario
- 1980-1986 Recipient of NSERC research grants for development of models to predict metal bioavailability, toxicity, fate and transport in freshwater ecosystem and freshwater sediment
- 1981 Langford Prize for contributions to environmental research and service to the Institute for Environmental Studies, University of Toronto.
- 1979 University Scholar, McGill University, Montreal

SKILLS

- superior written and oral communication abilities
- expert analytical and strategic problem solving capabilities
- team leadership
- excellent facilitation skills
- well developed, project planning and management skills
- issues management
- media relations
- alternative service delivery through private-public sector partnerships
- effective management of staff and volunteers
- successful in achieving consensus through conflict resolution
- networking with expert contacts within and outside of government, academia, locally, regionally and internationally
- quick to acquire new skills and apply new concepts
- public speaking
- highly self motivated

AREAS OF EXPERTISE

- Interface of science and policy
- Domestic and international environmental agreements
- Domestic and international regulatory frameworks, enforcement and compliance
- Development and delivery of workplans and business plans
- Performance development and performance appraisals
- Negotiation and consultation with external and internal stakeholders
- Communications and media interaction
- Stakeholder consultation
- Public outreach and education
- Strategic policy analysis
- Management of a multimillion dollar binational budget

- Staff and volunteer training and management
- Innovative solutions
- Great Lakes rehabilitation, conservation and protection
- Watershed Planning and Source Water Protection
- Ecosystem monitoring, surveillance, and objective setting
- Evaluation of environmental quality
- Nonprofit Organization and Foundation operations

SCIENTIFIC/ TECHNICAL EXPERTISE:

- Climate change impacts in the Great Lakes region
- Invasive species risk assessment and control
- Riparian zone rehabilitation and bioengineering
- Applications of constructed wetland for habitat and contaminant mitigation
- Fish and wildlife habitat rehabilitation and restoration
- Development of ecosystem objectives and indicators
- Limnology
- Ecotoxicology
- Ecology and evolutionary ecology
- Biology (cellular, organismal, invertebrate and vertebrate), physiology
- Inorganic and organic chemistry
- Biogeochemistry
- State of the Lake reporting
- Modelling the sources and pathways of persistent toxic chemicals and inorganic chemicals
- Development and implementation of remedial action plans for environmental revitalization
- Metal bioavailability, bioaccumulation, and modes of toxicity
- Assessment and remediation techniques for contaminated sediment
- Biological guidelines/criteria for ecosystem management
- Storm-water and non-point source pollution management
- Innovative infrastructure renewal methods, low impact development
- Design and measurement of performance indicators
- International, national, regional, local regulatory regimes

COMMITTEES AND BOARDS:

1. McMaster University Faculty Association (MUFA) Executive. September 2017 -
2. Recognized Reviewer Status, Aquatic Ecosystem Health and Management
3. Great Lakes Early Warning System (GLEWS) Working Group, International Joint Commission, 2017 -
4. Great Art for Great Lakes selection committee 2017
5. Recognized Reviewer Status, *Journal of Hydrology* 2017-present
6. Great Lakes Guardians' Council, Ontario Government 2015-present
7. Patron of the Governor General Great Lakes Initiative 2015 - present

8. Canada's Mirror Committee SMC/ISO/TC8/SC13, Marine Technology, Standards Council of Canada 2016-present
9. Review of the Great Lakes Institute for Environmental Research (GLIER), University of Windsor 2016.
10. Independent Review Panel, Canadian Environmental Assessment Agency, Milton Logistics Hub project 2016- invited
11. Nearshore Framework Task Team, Great Lakes Water Quality Agreement 2015-present
12. Extended Annex 2 Subcommittee, Great Lakes Water Quality Agreement 2015-present
13. Annex 9 Subcommittee, Great Lakes Water Quality Agreement 2015-present
14. Patron: Nature Conservancy Women for Nature 2015 - present
15. Phase II of Mowat-CGLR Low Water Levels Project, Cost-Benefit Analysis of Policy Options: Advisory Board 2015 - present
16. Georgian Bay Forever Board of Directors 2012 - 2015
17. Program Committee Co-Chair, Canadian Water Resources Association 2013-2014
18. Search Committee, Faculty of Engineering and Faculty of Social Science: AMD Chair in Advanced Manufacturing 2014-2015
19. Program Committee Chair, International Association for Great Lakes Research Annual Conference 2013-2014
20. GLIN Labs Advisory Panel (Great Lakes Information Network) 2009-
21. National Citizens Advisory Panel on Responsible Care. 2007 - Environmental Advisory Panel. NRTEE on Water. 2009 - 2013
22. Environmental Assessment Working Group. EC and HC. 2008 - 2011
23. Great Lakes Water Quality Agreement Renegotiation: Stakeholder Advisory Panel, Environment Canada 2010-2012
24. Great Lakes Fishery Commission: Board of Technical Experts; Co-Chair: Human Dimensions. 2009-2013
25. Great Lakes Economics Study Advisory Group; Government of Ontario 2010-11
26. Conference Chair. Energy2100: Making the Lakes Great. 2007 - 2008
27. Conference CoChair. Engineering in a Climate of Change: Making the Lakes Great 2009 - 2010
28. Search Committee, Faculty of Engineering and Faculty of Social Science: Water Policy Professor 2012
29. Search Committee, Faculty of Engineering, Associate Dean Graduate Studies 2009
30. Search Committee, Faculty of Engineering, Director, School of Engineering Practice 2009
31. Ontario Marine Transportation Advisory Panel (to the Minister of Transportation). 2007 -
32. Great Lakes Observing System. Regional Association Board Member 2006-2010
33. City of Toronto Wet Weather Management Master Plan Implementation Advisory Committee 2006 - 2010
34. Great Lakes Water Quality Agreement Review Working Group Member. 2006 - 2007
35. Canadian Association for Water Quality. Board Member 2005 –
36. Clean Water Foundation (2003- , founding Board member)
37. NSERC site visit committee for evaluation and ultimate approval of a multi-million dollar, multiyear collaboration among scores of academic and government researchers' project entitled "Metals in the Holistic Environment". 2004
38. Great Lakes Commission (IJC observer) 2001-2005
39. Agreement (Great Lakes Water Quality Agreement) Review Scoping Committee (2003-2006)

40. Centre for Environmental Health for Ontario (2003, founding Board member, past president)
41. Binational Executive Committee (Ontario member 1994-2001) (IJC observer) 2001-2005
42. Canada/Ontario Agreement Negotiation Team; Provincial Lead, 1999-2001
43. IJC Council of Great Lakes Research Managers 1998-2001
44. Binational Steering Committee on the review of the Great Lakes Water Quality Agreement 1997-1999
45. State of the Lakes Environment Conference Organizing Committee 1997-2001
46. Douglas Botanical Park and Nature Centre 1998- 2008 (founding member)
47. IJC Water Quality Board acting member 1996-2001
48. IJC Indicators Implementation Task Force 1997 – 1999
49. IJC Sediment Priority Action Committee 1996-2001
50. Great Lakes Communicators Network 1998 – 2005
51. International Association of Great Lakes Research 1995-1998 (president, 1997)
52. International Association of Great Lakes Research 5 Year Business Plan Committee 2004-2008
53. Toronto Community Foundation Environmental Advisory Panel: 1998-2001
54. Great Lakes Renewal Foundation: Senior Scientific Advisor: 1998- 2001
55. Collingwood Harbour Remedial Action Plan 1988-1994, Coordinator
56. Collingwood Harbour RAP ENVIROPARK committee 1988-1993
57. Collingwood Harbour RAP Habitat Rehabilitation Committee 1990-1993
58. Collingwood Harbour RAP Sewage Infrastructure Committee 1989-1993
59. Collingwood Harbour RAP Sustainability Committee 1992-1994
60. Ecosystem Objectives Working Group of the Binational Objectives Committee, 1989-1995
61. Canada/Ontario Remedial Action Plan Steering Committee 1994-2001, Chair

Lifetime Research Funding

SSHRC, 2012, \$24,000

Water Policy, Economic, and Governance Network, Subgrant from Brock University Steven Rensetti PI

SSHRC, 2012, \$25,000

Great Lakes Policy Research Network. Subgrant from Ryerson University Carolyn Johns PI

Transboundary Research University Network, 2012, \$5,000

Great Lakes Futures Scenario Project. Irena Creed, University of Western Ontario PI

SSHRC, 2013, \$21,000 over three years

Community First: Impact of Community Engagement, Geri Brigg PI

NSERC Create 2013: Great Lakes Multiple Stressors. \$21,00/yr for 3 years = \$63,000, Paul Silbey University of Guelph PI

Canadian Water Network: 2014 Development of Integrated Risk Management Framework for Municipal Water Systems \$35,000 for 18 months Ed McBean, University of Guelph, PI

NSERC Create 2015: Great Lakes Multiple Stressors. \$21,000/yr for 3 years = \$63,000, Paul Silbey University of Guelph PI

CFREF 2017, Lake Futures: Enhancing Adaptive Capacity And Resilience Of Lakes And Their Watersheds \$65,000/yr for 3 yrs, possibility for extension to 7 years. Basu University of Waterloo, PI

All the following were to Gail Krantzberg, PI

Hamilton Chamber of Commerce, 2012, \$21,000
Regeneration Institute for the Great Lakes

Canadian Food Inspection Agency, 2011, \$14,000
Leadership Training for the Public Service

Ontario Ministry of Environment 2010 \$25,000
Strategic Advice on Great Lakes Futures

Environment Canada, 2010 \$7,000
Review of the State of the Lakes Ecosystem Indicators

International Joint Commission, 2010 \$20,000
The 15th biennial report on progress in implementing the GLWQA

International joint commission 2009 \$15,000
Decision Analysis, Adaptive Management, and accountability for a great lakes nearshore Framework

Ontario Ministry of Environment 2009, \$25,000
Strategic Advice on the Great Lakes Water Quality Agreement

Ontario Ministry of Environment 2009, \$50,000
Vulnerability of beneficial uses to climate change in the Great Lakes

Walter Duncan Gordon Foundation, 2008, \$15,000
Great Lakes MetaStrategy

Natural Sciences and Engineering Research Council of Canada, 2007, \$95,000
Decision Analysis models for Great Lakes management

Joyce Foundation, 2006, \$164,000
Great Lakes governance

Ivey Foundation, 2006, \$10,000
Science-Policy futures

PUBLICATIONS

BOOKS

1. *The Regeneration Imperative*. 2015. V. Grover, B. Humber, Krantzberg, G. CRC Press.
2. *Urban Regeneration: the Hamilton Brand*. 2014. Krantzberg, G., B. Humber and V. Grover. Regeneration Institute for the Great Lakes and Renew Hamilton
3. *Responsible Care: A Case Study*. 2013. Topalovic, P. and G. Krantzberg (eds). De Gruyter, Germany
4. *Water Co-Management*. 2013. Grover, V. and G. Krantzberg (eds.) CRC Press
5. *Great Lakes Lessons in Participatory Governance*. 2012. V. Grover and G. Krantzberg (eds.). Scientific Research Publishing.
6. *Transboundary Lake Basin Management: Laurentian and African Great Lakes*, 2011. Adeel, Z., Velma I Grover, Gail Krantzberg, Colin Mayfield, Stu Finn, John Gannon, Jim Houston, Marc Gaden, Chris Goddard, Bob Hecky, Ted Lawrence, Dick Nyeko, Oliva Mkumbo, Tom Okurut,, Henry Mwima, and Laurent Ntahuga. UNU-INWEH, Hamilton, Ontario, Canada, 46 pg.
7. *Advances in Water Quality Control*. 2010. Krantzberg, G., A. Tanik, J.S. Antunes do Carmo, A. Indarto, and A. Edka (eds) . Scientific Research Publishing, USA. ISBN 978-1-935068-08-2

Book in preparation:

1. Lake Governance. 2017. A volume in the Water: Emerging Issues and Innovative Responses series, edited by Velma I. Grover and Gail Krantzberg. Taylor & Francis Group, LLC publishing.

PUBLICATIONS IN REFEREED JOURNALS/BOOKS:

1. Krantzberg, G. 2017. The Great Lakes Remedial Action Plan Program, a historical and contemporary description and analysis. University of Calgary Press. (in press)
2. Krantzberg, G. 2017. Governance and The Great Lakes Guardians' Council: Who are we and what should we be doing? *Journal of Aquatic Pollution and Toxicology* 1:2 pp 1 - 8

3. Song, A.M., O. Temby, G. Krantzberg, G. Hickey. 2017. Institutional features of US-Canadian transboundary fisheries governance: organizations and networks formal and informal In: *Towards Continental Environmental Policy?* (eds O. Temby and P. Stoett) Suny Press. 2017. pp 156-179
4. Krantzberg G. and S. Theriault. 2017. Would Implementing Responsible Care[®] Principles Improve the Safety of the Fracking Industry? *International Journal of Sciences* 6: 55-62
5. Krantzberg, Gail, Nick Luymes, Dave Taylor, Douglas Markoff, and Kirushanth Gnanachandran. 2017. A Call for Action to Protect Vernal Ponds in Ontario. *Wetland Science and Practice* March 2017: 20 - 28
6. VanNijnatten, Debora, Carolyn Johns, Kathryn Bryk Friedman, Gail Krantzberg. 2016. Assessing Adaptive Transboundary Governance Capacity in the Great Lakes Basin: The Role of Institutions and Networks. *International Journal of Water Governance* 1 7–32
7. Song, Andrew M., Gordon M. Hickey, Owen Temby, and Gail Krantzberg. 2016. Assessing transboundary scientific collaboration in the Great Lakes of North America. *Journal of Great Lakes Research*. Volume 42, 156–161.
8. Garrick, D, S. Jetto and G. Krantzberg. 2016. Building transboundary water governance capacity for non-point pollution: a comparison of Australia and North America. *International Journal of Water Governance*. *International Journal of Water Governance* 4 (2016) 111–132
9. Jetoo, S., V. I Grover, and G. Krantzberg. 2015. The Toledo drinking water advisory; Suggested Application of the water safety planning approach. *Sustainability* 7(8), 9787-9808.
10. Gail Krantzberg , Irena F. Creed , Kathryn B. Friedman, Katrina L. Laurent, John A. Jackson, Joel Brammeier, Donald Scavia. 2015. Community engagement is critical to achieve a “thriving and prosperous” future for the Great Lakes–St. Lawrence River basin *Journal of Great Lakes Research* 41 Supplement 1 (2015) 188–191
11. Kathryn B. Friedman, Katrina L. Laurent, Gail Krantzberg , Donald Scavia, Irena F. Creed. 2015. The Great Lakes Futures Project: Principles and policy recommendations for making the lakes great. *Journal of Great Lakes Research* 41 Supplement 1 (2015) 171–179
12. Katrina L. Laurent, Donald Scavia, Kathryn B. Friedman, Gail K. Krantzberg, Irena F. Creed. 2015 . Critical forces defining alternative futures for the Great Lakes–St. Lawrence River basin. *Journal of Great Lakes Research* 41 Supplement 1 (2015) 131–138
13. Laurent, K.L., Friedman, K.B., Krantzberg, G., Scavia, D., Creed, I. 2015. Scenario Analysis: An Integrative and Effective Method for Bridging Disciplines and Achieving a Thriving Great Lakes-St. Lawrence River Basin. *Journal of Great Lakes Research* 41 Supplement 1 (2015) 12–19
14. Laurent, K.L., D. Scavia, K.B. Friedman, G. Krantzberg, I.F. Creed. 2015. Critical forces directing the future: how two highly important and highly uncertain axes of analysis can frame alternate futures for the Great Lakes-St. Lawrence River Basin. *Journal of Great Lakes Research* Supplement 1 (2015) 131-138
15. Friedman, K., K.L. Laurent, G. Krantzberg, D. Scavia, I.F. Creed . 2015. The Great Lakes Futures Project: A framework and recommendations for keeping the lakes great. *Journal of Great Lakes Research* Supplement 1 (2015) 171-179

16. Jetoo, S., A. Thorn, K. Friedman, S. Gosman, and G. Krantzberg. 2015. Governance and geopolitics as drivers of change in the Great Lakes–St. Lawrence basin. *Journal of Great Lakes Research Supplement 1* (2015) 108–118
17. Orr, C., K. Williams, K. Laurent, K. Friedman, G. Krantzberg, D. Scavia, I.F. Creed. 2015. Trying hard to adapt to a chaotic world: How complex challenges overwhelmed our best intentions.) *Journal of Great Lakes Research 41 Supplement 1* (2015) 139–149
18. Bryan Comer, Shannon A. Fera, Sophie Splawinski, Katrina L. Laurent, Kathryn B. Friedman, Gail Krantzberg, Don Scavia, Irena F. Creed. 2015. Thriving and prosperous: How we rallied to confront collective challenges. *Journal of Great Lakes Research 41 Supplement 1* (2015) 161–170
19. Scott E. Kalafatis, Maureen Campbell, Frazier Fathers, Katrina L. Laurent, Kathryn B. Friedman, Gail Krantzberg, Don Scavia, Irena F. Creed. 2015. Out of control: How we failed to adapt and suffered the consequences *Journal of Great Lakes Research Supplement 1* (2015) 20-29
20. Keeler, B., B. Kelly, M. Gattinger, G. Krantzberg, T. Lyon, W. Mabee. 2015. Energy as a driver of change in the Great Lakes–St. Lawrence River Basin. *Journal of Great Lakes Research Supplement 1* (2015) 59-68
21. Abdel-Fattah, S., and G. Krantzberg. 2014. Commentary: Climate change adaptive management in the Great Lakes. *Journal of Great Lakes Research 40*: 578-580 .
22. Abdel-Fattah, S., and G. Krantzberg. 2014. A review: Building the resilience of Great Lakes beneficial uses to climate change. *Sustainability of Water Quality and Ecology 3–4* (2014) 3–13
23. Zhu, J., and G. Krantzberg. 2014. Policy analysis of China inland nuclear power plants' plan changes: from suspension to expansion. *Environmental Systems Research 2014*, 3:10
24. Grover, V.I. and G. Krantzberg. 2014. Transboundary water management: lessons learnt from North America. *Water International*
<http://dx.doi.org/10.1080/02508060.2014.984962>
25. Lopez A.I and G. Krantzberg. 2014. Using Mobile Phones for Environmental Protection in Africa: The Equatorial Africa Deposition Network Case Study. Chapter 10 In: *The African Mobile Story* (editors: Skouby K.E. & I. Williams) *River Publishers, Denmark*
26. Jetoo, S. and G. Krantzberg. 2014. A SWOT analysis of the Great Lakes Water Quality Protocol 2012: The Good, The Bad and The Opportunity. *Electronic Green Journal* (<http://escholarship.org/uc/item/7h26v4cv>)
27. Abdel-Fattah S., and G. Krantzberg. 2014. A Review: Building the Resilience of Great Lakes Beneficial Uses to Climate. *Sustainability of Water Quality and Ecology*.. December 2014.
28. Jetoo, S. and G. Krantzberg. 2014. Donning our thinking hats for the development of the Great Lakes nearshore governance framework. *Journal of Great Lakes Research 40* (463-465).

29. Abdel-fattah, S. and G. Krantzberg. 2014. A review: Building the resilience of Great Lakes beneficial uses to climate change. *Sustainability of Water Quality and Ecology*. <http://www.sciencedirect.com/science/article/pii/S2212613914000294>
30. Krantzberg, G. and J.E. Gannon. 2013. Innovation, Evolution and Applications of the Ecosystem Approach. In: Charles K. Minns , Brian J. Shuter & Mohiuddin Munawar. *Dr. Henry A. Regier C.M.: A tribute and felicitation by AEHMS*, Aquatic Ecosystem Health & Management, 16:4-5
31. Krantzberg, G. 2013. Governance reform to secure resilience in the nearshore waters of the Great Lakes basin. In *Water Co-Management*. Grover, G. and G. Krantzberg (eds.) CRC Press
32. deBoer, C. and G. Krantzberg. 2013. Great Lakes Water Governance: A Transboundary Inter-Regime Analysis. In: Jurian Edelenbos, Nanny Bressers and Peter Scholten,(Eds.) *Water Governance as Connective Capacity* (Ashgate): 313-332.
33. Krantzberg, G. 2012. Renegotiation of the 1987 Great Lakes Water Quality Agreement: From Confusion to Promise. *Sustainability* 2012, 4, 1239-1255
34. Topalovic, P., J. Carter , M. Topalovic, G. Krantzberg. 2012. Light Rail Transit in Hamilton: Health, Environmental and Economic Impact Analysis. Soc Indic Res. DOI 10.1007/s11205-012-0069-x
35. Krantzberg, G. 2012. First off the List: The Collingwood Harbour Story. In *Great Lakes Lessons in Participatory Governance*. 2012. V. Grover and G. Krantzberg (eds.). Scientific Research Publishing.
36. Krantzberg, G. 2012. Remedial Action Plans, an adventure in participatory decision making. *Great Lakes Lessons in Participatory Governance*. 2012. V. Grover and G. Krantzberg (eds.). Scientific Research Publishing.
37. McLaughlin, C and G. Krantzberg. 2012. An Appraisal of Management Pathologies in the Great Lakes Science of the Total Environment Volume 416, 40–47
38. McLaughlin, C and G. Krantzberg. 2011. An appraisal of policy implementation deficits in the Great Lakes. *J. Great Lakes Res* 37: 390-396
39. Krantzberg, G. Governance Reform for a Sustainable Great Lakes Future. In Proceedings of the 1st World Sustain. Forum, 1-30 November 2011; Sciforum Electronic Conferences Series, 2011. <http://www.sciforum.net/presentation/559>
40. Rankin-Gouthro, E, and G. Krantzberg, 2011. Using Scenario Building to Create A New vision and Invigorate an “Activist Agenda” for the Great Lakes St. Lawrence Basin. EGJ 1(31) <http://escholarship.org/uc/item/3s20t46r>

41. Krantzberg, G. 2010. Revitalization Plans and Implementation, Collingwood Harbour, Georgian Bay, Ontario. In: *Advances in Water Quality Control*. Chapter 10. Edited by Krantzberg, G, A. Tanik, J. Antunes do Carmo, A. Indarto, and A. Ekdal. Scientific Research Publishing. pp. 194 - 204
42. Peter Topalovic and Gail Krantzberg. 2010. With supply chains strung across the developing world how can the chemical industry ensure that the end product is safe? *Canadian Chemical News* (July/August: 21 - 25)
43. Krantzberg, G . and J. Manno. 2010. Renovation and innovation; it's time for the Great Lakes regime to respond. *J. Environmental Management* (published online May 6 2010)
44. Sheikheldin, G., G. Krantzberg , and K. Shaefer. 2010. Science-Seeking Behaviour of Conservation Authorities in Ontario. *Environmental Management* 45: 912-921
45. Krantzberg, G. 2010. The Whimsy That Is Becoming To Be. *Lakeviews* January 2010. http://glos.us/updates/2010/lakeviews_v7.html#story1
46. Krantzberg, G. and R. Basserman. 2010. How our energy future affects our water future. *Jour. Policy Engagement*. 2: (1): 2 - 5
47. Krantzberg, G. and A. Hrymak. 2009. How Society Gains from Engineers Educated in Public Policy. *Jour. Policy Engagement*. 1(2): 2 – 4
48. Krantzberg, G. 2009. Representative Case Studies in the Province of Ontario. Collingwood Harbour, Georgian Bay. Welbourn, P., H. Cleghorn, J. Davis, S. Rose. *The Story of Brownfields and Smart Growth in Kingston Ontario: From Contamination to Revitalization*. ©2009 Classroom Complete Press, 325pp.
49. Krantzberg, G. 2009. Renegotiating the Great Lakes Water Quality Agreement: the Process for a Sustainable Outcome. *Sustainability* 1(2): 254-267
50. Manno, J. and G. Krantzberg. 2008 *Rediscovering and Revitalizing the Great Lakes Governance*In: Bosselmann, K., R. Engel and P. Taylor (eds) *Governance for Sustainability – Issues, Challenges, Successes*. IUCN, Gland. Switzerland. pp. 159-170
51. Krantzberg, G. 2008. The 35th Anniversary of the Great Lakes Water Quality Agreement. *Environmental Management: Issue 26* ISSN 1076-7975
52. Krantzberg, G., and C. de Boer. 2008. A Valuation of Ecological Services in the Laurentian Great Lakes Basin with an emphasis on Canada. *JAWWA*. 100: 6 100 - 111).
53. Krantzberg, G. 2008. The Great Lakes, A 35th Year Anniversary: Time to Look Forward. *Electronic Green Journal* Issue 26, Spring 2008 ISSN: 1076-7975
54. Krantzberg, G. 2007. The Ongoing Review of the Great Lakes Water Quality

Agreement. *J. Great Lakes Research* 33: 699 – 703

55. Krantzberg, G and K. Montgomery. 2007. Restrictions on Dredging as an Impaired Beneficial Use under the Great Lakes Water Quality Agreement. *Aquatic Ecosystem Health and Management Society* 10: 117-124
56. Krantzberg, G. 2007. The Great Lake's Future at a Cross Road. *The Environmentalist*. DOI 10.1007/s10669-007-9139-z
57. McLaughlin, C. and G. Krantzberg 2006. Towards A 'Better Understanding' Of The Great Lakes Basin Ecosystem. *J. Great Lakes Research* 32:197–199
58. Krantzberg, G. 2006. Sustaining the Gains Made in Ecological Restoration. *Environment, Development and Sustainability* 8: 413–424
59. Krantzberg, G. M. Bratzel and J. McDonald. 2006. Contribution of the International Joint Commission to Great Lakes Renewal. *The Great Lakes Geographer* 13, 25 - 37
60. Krantzberg, G. 2004. Science Must Inform Great Lakes Policy. *J. Great Lakes Research*, Volume 30 (573-574)
61. Krantzberg, G. 2003. Keeping Remedial Action Plans on target: lessons learned from Collingwood Harbour. *J. Great Lakes Research* (29): 641-651.
62. Krantzberg, G. 2002. Restoring Active Participation. *J. Great Lakes Research*, Volume 28 (491-492)
63. Zarull, M.A., Hartig, J.H. and Krantzberg, G. 2002. Ecological Benefits of Contaminated Sediment Remediation. *Rev. Environ. Contam. Toxicol.* 174: 1-18.
64. Krantzberg, G. 2002. What progress has been made in the RAP program after 10 years of effort? *Handbook of Water Sensitive Planning and Design* (R.L. France Ed.) Harvard Press.
65. Krantzberg, G., M.A. Zarull and J.H. Hartig. 2001. Sediment management, ecological and ecotoxicological effects must direct actions. *Water Quality Research J. Canada* 36 (367-376)
66. Krantzberg, G. 2001. Modernizing Annex 2 of the Great Lakes Water Quality Agreement. *Toledo Journal of Great Lakes Science Law and Policy* 3: 112-124
67. Krantzberg, G., M.A. Zarull and J.H. Hartig. 2000. Deciding when to intervene. *Environ. Science Technology*. (22A-27A)
68. Krantzberg, G. 2000 Making the Lakes Great. In: *Storm Warnings, Voices for the Waters*. B. Littelljohn & G. Glipin Beck (eds.) (95-98)

69. Krantzberg, G., T. Reynoldson, R. Jaagumagi, S. Painter, D. Boyd, D. Bedard and T. Pawson. (2000). SEDS: Setting Environmental Decisions for Sediment management. *Aquatic Ecosystem Health & Management Society* 3: 387-396
70. Hartig, J.H., L. Maynard, M.A. Zarull and G. Krantzberg. 1999. Sediment remediation can improve Great Lakes water quality. *Water Env. & Technology* 10: 12-13
71. Krantzberg, G., J. Ciborowski, M. Ginnebaugh, D. Lee. 1999. Five Year Workplan of the International Association for Great Lakes Research. *J. Great Lakes Research* 25: (423-427)
72. Zarull, M, J. Hartig, G. Krantzberg. (1999) Overcoming obstacles to sediment management in the Great Lakes. *J. Great Lakes Research* 25: (412-422)
73. Krantzberg, G. , H. Ali and J. Barnes. 1999: Measuring ten years of progress in the Canada/Ontario Remedial Action Plan Program. In: *Aquatic Restoration in Canada* (T. Murphy and M. Munawar Eds) *Ecovision World Monograph Series*, Backhuys Publ, the Netherlands. pp. 1 – 13
74. Krantzberg, G. (1998) After more than ten years of effort, are Remedial Action Plans making a difference? *J. Great Lakes Research* 24: 485-486
75. Krantzberg, G. (1998) A research agenda for Great Lakes revitalization and Protection. *The Toledo J. of Great Lakes' Law, Science & Policy.* 1:13-25
76. Krantzberg, G. 1997. Editorial: Research Priorities for Great Lakes Rehabilitation. *J. Great Lakes Research* 23
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1. Jetoo, S, and G. Krantzberg. 2017. Eutrophication governance in Chesapeake Bay and the Baltic Sea: A comparison of the determinants of adaptive capacity. *Journal of Environmental Sciences* (submitted)
2. Krantzberg, Gail and Velma I Grover. 2017. Transboundary Governance in North America, More than 100 years of Development, Operation, and Evolution of the International Joint Commission. *Lake Governance*, "A volume in the Water: Emerging Issues and Innovative Responses series. Taylor and Francis Publishers (Grover VI and G Krantzberg editors). (submitted)
3. Krantzberg, G. 2017. Revisiting Governance Principles for Effective RAP Implementation and Capacity Building. *Aquatic Ecosystem Health and Management (AEHM)* (submitted)
4. Krantzberg, G. 2017. Collaborative Governance for the Development and Implementation of Revitalization Plans to enhance and Sustain Ecosystem Resilience. Case Study: Collingwood Harbour, Georgian Bay, Ontario. **Book on Collaborative Governance** (submitted)
5. Jawed, Z. and G. Krantzberg. 2017. Public Participation in Sediment Remediation Projects: Encouraging Transparent Decision-Making *Journal of Environmental Management* (submitted June 11, 2017)
6. Jawed, Z. and G. Krantzberg. 2017. Using Qualitative Document Analysis to understand Sediment Remediation Policies in North America. *Journal of Environmental Management* (June 12, 2017) (submitted)
7. Jawed, Z. and G. Krantzberg. 2017. A comparative analysis of practitioners' experience in sediment remediation projects to highlight best practices. *Water Quality Research Journal of Canada* (June 12, 2017) (submitted)
8. Jawed, Z. and G. Krantzberg. 2017. A Decision Support System Framework for Contaminated Sediment Management. *Journal of Water Resources Planning and Management* (submitted)

OTHER PUBLICATIONS

1. Krantzberg, G. 2017. Briefing on Great Lakes Threats and Opportunities. Philanthropic Organization Options.
2. Krantzberg, G. 2017. Motion on Bottled Water Report to Hamilton Board of Health: water extraction for commercial purposes.
3. Krantzberg, G. 2017. Governance and The Great Lakes Guardians' Council: Guidance for the Province of Ontario.
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6. McDermid, J.L., S.K. Dickin, C.L. Winsborough, H. Switzman, S. Barr, J.A. Gleeson, G. Krantzberg, P.S. Gray. 2015. State of Climate Change Science in the Great Lakes Basin: A Focus on Climatological, Hydrological and Ecological Effects. Prepared joint by the Ontario Climate Consortium and Ontario Ministry of Natural Resources and Forestry to advise Annex 9 – Climate Change Impacts under the Great Lakes Water Quality Agreement. October 2015. <http://climateconnections.ca/our-work/the-state-of-climate-change-science-in-the-great-lakes/>
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57. Fox, B., E. Janz, B. Wynnycky, M. Alles-DeVos and G. Krantzberg. 1996. The Relationship between RAP Implementation and Municipal Planning and Programs. Ontario Ministry of Environment and Energy.
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60. Krantzberg, G., Collingwood Harbour Action Team and PAC. 1994. The Collingwood Harbour RAP Stage 3 Document, Right On Target. Draft Report, April 1994. ISBN 0-7778-2756-5.
61. Collingwood Harbour Implementation Subcommittee: Planning for the Future. Report of the Coastline Development and Sustainability Subcommittee to the Collingwood Town Council. January 1994. ISBN 0-7778-2695
62. Krantzberg, G. 1994. Meeting Biological and Chemical Targets for Collingwood Harbour Sediment. RAP Environmental Status Report. ISBN 0-7778-2697-6
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66. Krantzberg, G. 1991. Making Choices: a discussion paper on remedial options. Ontario Ministry of the Environment Technical Report in support of the Collingwood Harbour Remedial Action Plan.
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69. Krantzberg, G. 1990. Sediment bioassays and sediment core chemistry, Collingwood Harbour 1988-1989. Collingwood Harbour Remedial Action Plan Technical Report. ISBN # 0-7729-7576-0
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71. Krantzberg, G. 1988. Sediment bioassay research and development. Report to the Research Advisory Committee, Ontario Ministry of the Environment. Post-doctoral grant PDF03.
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73. Krantzberg, G. 1987. A study of the role of biotic and abiotic factors in metal accumulation by Chironomus (Diptera, Chironomidae). Ph.D. dissertation, Department of Botany, University of Toronto.

PRESENTATIONS AT CONFERENCES, SEMINARS, MEDIA:

1. Krantzberg, G. The Future of Great Lakes Excellence. The Riverwood Conservancy, Mississauga, ON, Oct 14, 2017
2. Krantzberg, G. Governance Characteristics that Result in Sustainable RAP Achievement. The First Century of the International Joint Commission Conference, Ottawa, September 25-26 2017
3. Krantzberg, G., Great Lakes Legislative Caucus Annual Meeting. September 22 - 23 , 2017. Shining a "spotlight" on Lake Ontario, its unique characteristics, its importance to the region, and the challenges the lake faces

4. Krantzberg, G. The Remedial Action Plan Program. NSERC CREATE seminar, Sept 19, 2017, U of Guelph
5. Krantzberg, G. in: The Impacts of Climate Change on Ontario and the Great Lakes TVO The Agenda With Steve Paikin. Toronto September 13, 2017
6. Krantzberg, G. in: CBCNews. As weather extremes become the norm, taxpayers must foot the bill for climate chaos: Great Lakes and other flooding costs mount as engineers struggle to cope with new climate patterns By Don Pittis, CBC News Posted: Jun 01, 2017 5:00 AM
7. Krantzberg, G. Great Art for Great Lakes Mississauga Launch engagement event. June 2017
8. Krantzberg, G. Great Art for Great Lakes Hamilton Launch engagement event. June 2017
9. Krantzberg, G. Grade 2 Science: Air and Water. DELTA - an Inquiry/ Experiential/ Mentorship Science & Tech focused curriculum offered to Elementary schools in Ontario. Toronto, May 2017. Filmed for delivery to Toronto District School Board 200 teachers meeting
10. Al-Dabbagh, O., Krantzberg, G. and Grover, V.I. Phosphorus and Nitrogen as Large-Scale Stressors in the Great Lakes. International Association for Great Lakes Research, Detroit, May 2017
11. Mclaughlin, C. and Krantzberg, G. Remedies for improved development and implementation of Remedial Action Plans in the Great Lakes. International Association for Great Lakes Research, Detroit, May 2017
12. Krantzberg, G. Assessing governance capacity for nearshore zones and AOCs. International Association for Great Lakes Research, Detroit, May 2017
13. Rich, M. and Krantzberg, G. Sustaining Stewardship and Community Engagement after Delisting the Collingwood Harbor AOC. International Association for Great Lakes Research, Detroit, May 2017
14. Krantzberg, G. Motion on Bottled Water presentation to Hamilton Board of Health: water extraction for commercial purposes. Hamilton April 23 2017
15. Krantzberg, G. in: Trump and the Great Lakes. TVO The Agenda With Steve Paikin. Toronto, March 22 2017
16. Great Lakes Challenges and Opportunities. Enbridge engagement. Toronto, January 2017
17. Great Lakes Protection Act Alliance: setting priorities for action. Toronto January 2017
18. Remedial Action Plans, the nexus of science and policy. CREATE workshop, Guelph, September 2016
19. Great Lakes Protection Act Alliance: Future of Great Lakes Guardians' Council working groups. Toronto September 2016
20. Great Lakes Great Responsibilities. Canadian Mensa Annual Gathering, Toronto. June 2016
21. The Science-Policy needs for Great Lakes Governance. International Association of Great Lakes Research, Guelph, June 2016
22. Great Lakes resilience and water scarcity? Seneca College. March 2016
23. Growing Canada to 100,000,000 people. Public Policy Panel. Seneca College. October 2015
24. Climate change in the Great Lakes: A call for adaptation strategies. McMaster University. Oct. 2015
25. Defining sustainability for practical application. McMaster University. Sept. 2015.

26. Can we avoid the Great Lakes tipping point? Water After Borders. Chicago, April 2015
27. Great Lakes: Who's in Charge? McMaster Water Network, Hamilton, April 2015
28. Policy Findings explored at "Water a Risky Business": to the Canadian Municipal Water Consortium, Mississauga, ON. March 2015
29. Integrated Water Resource Management: Policy Matters. "Water a Risky Business: Canadian Water Network, London ON. March 2015
30. Great Lakes Great Responsibilities, Governance Challenges. McMaster Water Week, Hamilton October 2014
31. Re-evaluation of Indicators of Toxic Chemicals in the Great Lakes. Murray, M.W., Debarros, C., Krantzberg, G., Ridal, J., and Swackhamer, D. International Association for Great Lakes Research, Hamilton May 2014
32. Strategic tools to overcome policy barriers and move the Great Lakes-St. Lawrence River Basin closer to a "thriving and prosperous" future. Laurent, K.L. Friedman, K.B., Krantzberg, G. Scavia, D., and Creed, I. International Association for Great Lakes Research, Hamilton May 2014
33. The need for governance indicators for the Laurentian Great Lakes. Jetoo, S. and Krantzberg, G. International Association for Great Lakes Research, Hamilton May 2014
34. The State of Urban Phosphorus Management in the Lake Erie Basin. Nesbitt, R.A.¹, Krantzberg, G.², Hutchinson, N.J.¹, International Association for Great Lakes Research, Hamilton May 2014
35. Transboundary Governance Capacity: Towards Indicators and an Analytical Framework Vannijnatten, D.L., Bryk-Friedman, K., Johns, C., and Krantzberg, G. International Association for Great Lakes Research, Hamilton May 2014
36. A Look Into the Future of the Great Lakes. Waterloo Water Institute Conference, May 2014
37. Great Lakes Threats and Responses. Canadian Water Resources Association 2014 conference Expert Panel. Hamilton ON.
38. Public Policy Outreach Initiatives of the Great Lakes Policy Research Network. Washington D.C. April 2014. <http://www.wilsoncenter.org/event/the-great-lakes-st-lawrence-region-improving-policy-outcomes-through-research-and-engagement>
39. Career Pathways for Environmental Science and Management. Royal Botanical Gardens, Hamilton, April 2014
40. 21st Century Water Security Challenges for Society and Science. McMaster University Panel Discussion. April 2014
41. Great Lakes co-management, prospects for the future. Barrie, Ontario, March 2014
42. Great Lakes Great Responsibilities. The Riverwood Conservancy, Mississauga, March 2014
43. Implementation strategies for a Great Lakes resilient Future. Buffalo, New York, October 2013
44. What the prescription for Great Lakes hold 10 years later: Great Lakes Week, Milwaukee September 2013
45. Great Lakes Scenario Workshop, McMaster University, Hamilton June 2013
46. Great Lakes Futures Project, International Association of Great Lakes Research, Lafayette, June 2013
47. Great Lakes and strategic planning. APA Chicago April 2013
48. Great Lakes 100 years from now. CUSLI, Cleveland, April 2013
49. The challenge to Great Lakes excellence. Probus Mississauga, March 2013
50. Great Lakes Great Responsibilities. Wilfred Laurier Conference, March 2013

51. Great Lakes scenario experiments. University of Michigan. January 2013
52. Chemical Indicators of Great Lakes Integrity. IJC Workshop, Windsor, Sept. 2012
53. Evidence of Implementation Deficits for Great Lakes Greatness. University of Guelph, June 2012, 7th Peter Yodzis Colloquium in Fundamental Ecology Sustainability, socio-ecological complexity and adaptive management: Opportunities and challenges *Keynote Address*
54. Great Lakes Science Research, a focus on Ontario Ministry of Environment's 40th Anniversary. ON, May 2012, *Keynote Address*
55. Complex science is no match for impaired governance. International Association for Great Lakes Research. Cornwall, ON, May 2012, *Keynote Address*
56. From Remedial Action Plans to a Nearshore Governance Framework. International Association for Great Lakes Research. Cornwall, ON, May 2012
57. Engineering and Politics. The Global Engineer Conference, McMaster University. March 2012
58. Great Lakes, Great Responsibilities; a Canadian Perspective. 7th Circuit Bar Association Great Lakes Conference, Chicago, March 2012
59. The history and future of the Remedial Action Plan Program. Canada-Ontario Agreement Workshop. Niagara on the Lake. February 2012
60. Engineering and Public Policy, the Collingwood Harbour RAP experience. NCWIE. Hamilton, November 2011
61. Great Lakes Responsibility, the role of youth. Green Citizen Conference, Seneca College, Toronto, October 2011
62. From lakewide approaches to local co-management. Living Arts Centre, October 2011
63. Great Lakes Science Informs Policy. Georgian Bay Forever Forum. Toronto, March 2011
64. Green Belts for Great Waters. Global Greenbelts Conference. Toronto, March 2011
65. Engineering Innovation and Health Care public policy. Panel member, Toronto March 2011
66. Adaptation strategies for the Great Lakes. Climate Change Adaptation Conference, Conservation Ontario. March 2011
67. The transportation-water quality nexus. Transportation Summit 2011, City of Hamilton, March 2011
68. Many Jurisdictions, One Resource: Managing Change in Canada-U.S. Transboundary Waters. Water Canada Roundtable. February 2011
69. The role of Engineerings in Environmental Policy. Engineers Without Borders International Conference. Toronto, January 2011
70. Great Lakes, our shared future. Probus Oakville. January 2011
71. Challenges for the next 25 years of Responsible Care. Chemistry Industry Association of Canada AGM. Ottawa October 20, 2010. Expert Panel
72. Great Lakes, Great Cities, Great Responsibilities. Aquatic Toxicity Workshop. Toronto October 4, 2010. Plenary Speaker
73. From Water Quality to the Ecosystem Approach. World Water Congress. Montreal, September 2010
74. The need for a Regeneration Institute for the Great Lakes. Canadian Water Summit, Toronto, June 18 2010
75. Scenarios for a Great Lakes Future. International Association for Great Lakes Research Toronto, May 20, 2010

76. The Ecosystem Approach, a tribute to Henry Regier. International Association for Great Lakes Research Toronto, May 18, 2010
77. The Public Policy Process. Ontario Centre for Engineering and Public Policy, Annual General Meeting. Toronto, May 7 2010
78. Great Lakes Great Responsibilities. Institute for Journalism & Natural Resources. Burlington April 25, 2010
79. Valuation of Great Lakes resources and services. 5th Binational Lake St. Clair conference. Managing Lake St. Clair for an Ever Changing Environment March 31, Windsor, ON
80. Great Lakes Binational Governance. Glass Half Full, Science for Peace Conference, McMaster University. March 13 2010
81. Opportunities to Regenerate Great Lakes Excellence. Canadian Water Resources Association, Feb 5, Burlington ON
82. Great Lakes at a crossroads. February 2010. Mississauga Probis.
83. Valuation of Great Lakes natural Assets. Latormnel. November 2009. Alliston Ontario
84. Great Lakes Greater Stakes. A green midwest, a blue midwest globalization and the midwest conference. Chicago. November 2009
85. The Great Lakes MetaStrategy. International Joint Commission Round Table. October 2009. Windsor, Ontario.
86. Great Lakes Governance Reform. International Association for Great Lakes Research, Toledo, Ohio. May 2009
87. Sustainable Engineering. George Brown College, Toronto, March 31, 2009
88. Great Lakes indicators and Endpoints. International Association for Great Lakes Research, Toledo, Ohio. May 2009
89. Green Energy Green Economy Act. Governance and policy challenges for Engineers. Toronto. April 2009
90. The Use of Science for Decision Making: Public Policy for Ontario's Conservation Authorities. Conservation Ontario Directors Meeting. Black Creek Pioneer Village, Toronto, April 2009
91. Great Lakes Great Responsibilities. Stoney Creek Rotary Club. April 2009 .Preserving Ontario's Freshwater, Ontario Headwaters Institute, Toronto, March 27, 2009.
92. Great Lakes threatsCorporate social responsibility and solutions. Oshawa Chapter, Canadian Society of Civil Engineers.Green enegineering. everGREEN Conference, McMaster University. March 20, 2009
93. Great Lakes Great Responsibilities. . Canadian Association for Water Quality, Burlington, February 23, 2009
94. The Use of Science for Decision Making: A Scan of Conservation Authorities in Ontario. Canadian Association for Water Quality, Burlington, February 24, 2009
95. The Science Policy Discourse. Canadian Association for Water Quality, Burlington, February 24, 2009
96. A Great Lakes Agenda for Accountability. On the Waterfront: A Clear Commitment, Hamilton, Ontario Rotary District 7090. October 17-19, 2008.
97. Great Lakes Panel; Banff Forum, Banff Forum VII In The Shadow of a Stumbling Giant? Canadian/U.S. Relations in a New Era. Niagara on the Lake, Ontario, October 9 – 11 2008
98. Great Lakes leadership for Binational renewal. Marshall Plan for the Great Lakes St. Lawrence.. Great Lakes St. Lawrence Cities Initiative Annual Conference. July 18 2008. Toronto, Ontario.

99. Participatory Decision making for Sustainable Communities. International Association for Great Lakes Research Annual Conference. Trent University, Peterborough, May 2008
100. Great Lakes Great Responsibilities. Energy2100: Making the Lakes Great. Toronto, Ontario. April 23, 2008
101. Breaking Down the Silos. Implementing Integrated Watershed-Wide Sustainability Plan. Credit Conservation Authority Workshop, Mississauga, November 2007
102. Our Great Lakes Futures: to where from here? A.G. Latornell Symposium, Barrie, Ontario November 2007 Keynote speaker
103. Source Water Protection and collateral benefits. Lake Ontario Shoreline Algae Action Advisory Committee. Invited Speaker. Hamilton, September 2007
104. Great Lakes Areas of Concern: Achieving Restoration Targets and Sustaining Stewardship. What makes and Area of Concern and Area of Concern. Cleveland, June 2007
105. Advances in the Great Lakes Observing System and its Regional Association. International Association for Great Lakes Research. May 2007
106. A Great Lakes Water Quality Agreement Conversation Society of Environmental Journalists, Saginaw Bay Michigan, May 2007
107. Economic and Ecologic threats to the Great Lakes. Invited speaker. 70th Annual International Joint Conference of the Canadian Shipowners Association and the Lake Carriers' Association. Tampa, February 2007
108. Great Visions for Great Lakes. Coastal Centre, Nottawasaga Bay, July 2007
109. Emerging chemicals and the future of Great Lakes policy, University of Toronto, February 2007
110. Valuation of Great Lakes Natural Assets. Presentation to Ministry of Natural Resources, Toronto, January 2007
111. Emerging chemicals and the future of Great Lakes policy, McMaster University, December 2006
112. Great Lakes Great Watersheds. Lattornel Conference, Barrie, Ontario November 2006
113. Conservation Ontario Priorities for the Great Lakes. Conservation Ontario November Workshop, Toronto 2006
114. Capacity Building for Watershed Management. Pollution Probe Workshop. June 2006, Guelph, Ontario.
115. Revitalizing the Great Lakes, Renewing Commitments. Great Lakes United Annual General Meeting, Dinner Keynote Address, June 2006, Michigan.
116. Great Lakes governance and policy challenges. International Association for Great Lakes Research Annual Conference. Windsor, May 2006
117. The Great Lakes Water Quality Agreement: Revitalize, Revise, Renegotiate? Sustainable Development . Freshwater for the Future - Conference on Freshwater Policy Sustainable Development. Invited Speaker, Ottawa May 2006
118. Water Quality Challenges in a Trans-boundary Area. One Region. Two Niagara. Our Shared future. Lunch Keynote Address. May 2006, Niagara Falls
119. Freshwater for the Future - Conference on Freshwater Policy
120. Great Lakes Journalism Matters. The Not So Great Lakes conference, Windsor. March 2006

121. The role of science in policy formulation in the Great Lakes Region. University of Toronto Seminar. March 2006
122. 41st Central Canadian Symposium on Water Quality Research. NWRI, Burlington, ON. Feb 2006
123. Science influences Policy in the Great Lakes Basin. Kempenfelt Retreat, Ministry of Environment, Environmental Monitoring and Reporting Branch. Jan. 2006
124. Watersheds for sustainability. Healthy Waters, Healthy Communities Latourneel Conference, Ontario November 2005
125. The Future of Great Lakes Governance. SETAC, Baltimore Nov. 2005
126. Revitalizing the Great Lakes. Future Opportunities. American Water Works Association, San Francisco, June 2005.
127. Delisting targets for Eutrophication and Beach Closings. International Association for Great Lakes Research. Michigan. June 2005.
128. Watersheds as the Planning Unit for Receiving Water Protection. Ontario Water Works Association Spring Specialty Seminar. Toronto, March 2005.
129. A primer on Lakewide Management Plans and the Great Lakes Water Quality Agreement. International Joint Commission's Water Quality Board Workshop on Watershed Approaches. Ypsilanti, MI March 2005.
130. Climate change scenarios: Projected implications for Great Lakes water quality and quantity. Climate Change Effects on Fisheries and Aquatic Resources: Exploring the Reality of Adaptation in the Great Lakes Basin, Windsor. January 2005
131. Searching for Sustainability. Society of Environmental Journalists Annual Meeting, Pittsburgh. October 2004
132. Great Lakes Water Quality Agreement and progress in restoration. Society of Environmental Journalists Annual Meeting, Pittsburgh. October 2004
133. The role of the IJC in Great Lakes protection: climate change as a pressure on ecosystem sustainability. Coastal Zone Climate Change and Adaptation Workshop Parry Sound. August 2004.
134. Sediment Remediation, lessons learned in 2004. International Association for Great Lakes Workshop, May 2004.
135. Remedial Action Plans: staying on target. International Joint Commission Workshop, Ann Arbor, September 2003
136. Beyond Borders. Environmental Grantmakers Network Conference, Ottawa, September 2003
137. Great Lakes challenges and solutions. Midwest Legislatures Congress, Milwaukee, August 2003
138. Assessing Beneficial Uses. Great Lakes Commission/USEPA Remedial Action Plan Workshop, Detroit, May 2003.
139. Measurement for Management. Society of Toxicology and Chemistry, invited speaker, Utah, November 2002
140. Great Lakes Water Quality Agreement and the International Joint Commission. Managing Shared Waters, invited speaker, Hamilton, June 2002,
141. Lake Huron, challenges faced. Lake Huron Workshop, Port Huron, MI, Jan. 2002.
142. Overcoming obstacle to sediment management. Binational Toxics Strategy Workshop, Ann Arbor, MI, April 2001
143. Assessing the data: Deciding when to intervene. Contaminated Sediment, Legal Institute of the Great Lakes, Toledo, April 2000, invited speaker

144. Great Lakes urban waterfront action plans. Water Sensitive Ecological Planning and Design, Harvard, Cambridge, February 2000, invited speaker
145. Decision-Making using ecologically relevant data interpretation
146. 35th Central Canada symposium on Water Pollution Research,. Burlington, ON, Feb. 2000, Session co-chair
147. Overcoming obstacles for sediment management. International Joint Commission Biennial Forum, Milwaukee, Session Co-chair, October, 1999
148. Working together for our Great Lakes. The Civic Garden Centre's Edwards Lecture Series, Guest Speaker, Toronto, October 1999
149. Taking stock of Remedial Action Plans. Ontario Public Advisory Council annual conference, Toronto, October 1999
150. Decision making for sediment management. IJC Biennial Forum, Milwaukee, September 1999
151. Is the Coast Clear? Conference on the state of the Lake Huron Environment, Goderich August 1999, plenary speaker
152. Deciding when to intervene. Annual Conference of the Internat. Ass. Great Lakes Res. Toledo May 1999
153. Implementing Indicators to measure outcomes of the Great Lakes Water Quality Agreement. Annual Conference of the Internat. Ass. Great Lakes Res. Toledo May 1999
154. Making decisions for the management of contaminated sediment. Water Quality Board public meeting, Toronto, May 1999
155. Sharing experiences in habitat rehabilitation II, invited speaker, Toronto, November 1998
156. Environmental priorities in the Toronto Region, invited speaker, Toronto Community Foundation Sept 28, 1998
157. Successful partnerships for Great Lakes Clean-up, invited speaker, Indiana Sept. 1998
158. Making biologically based decision on sediment management, keynote address, Sediment Quality Assessment 3, the Netherlands. August 1998
159. Community based decision making for sediment management, invited speaker, Great Lakes Mayor's conference, Windsor. July 1998
160. Environment and the Health of our Children. Best Start Barrie, invited speaker April 1997
161. Biodiversity and Sustainability Conference, Lindsay College, invited speaker March 1997
162. Innovative Funding Alternatives for Great Lakes Rehabilitation. Racine WI, invited speaker July 1996
163. Conference on Water and First Nations in Ontario, Brantford Ont., invited speaker Oct. 1995
164. International Joint Commission, Biennial Meeting, Duluth, MI, invited speaker Sept. 1995
165. Successful Strategies for Great Lakes Remedial Action Plans, Racine WI, invited speaker July 1995.
166. Habitat Restoration and the Clean Water Act, Chicago, invited speaker, March 1995
167. American Society of Consulting Engineers, Billings, Montana, invited speaker Oct. 1994.
168. Aquatic Toxicity Workshop, Sarnia, October 1994.

169. Coastal Zone Canada, Halifax, N.S., invited speaker September 1994.
170. Atlantic Coast Action Plan Annual Meeting, Lunenburg, N.S., invited speaker
Sept. 1994
171. Association of Municipalities of Ontario, Toronto, invited speaker August 1994.
172. Black River RAP Workshop, Cleveland, Ohio, invited speaker July 1994.
173. Grand River Conservation Authority Water Quality Workshop, Waterloo, invited
speaker May 1994.
174. Voluntary Pollution Prevention Programs, Ontario, invited speaker April 1994.
175. North Simcoe Environment Watch, invited speaker, Orillia, April 1994.
176. IJC RAP Forum, Windsor, invited speaker, Ont. Oct. 1993.
177. Lake Huron Basin Symposium, invited speaker, Windsor, Ont. Oct. 1993.
178. Toronto Contaminated Sediment Workshop, invited speaker, Toronto, Ont.
August 1993
179. Workshop on Community Involvement in Decision Making, invited speaker,
Quebec, June 1993
180. Stormwater and Combined Sewer Outfall Technology Transfer Conference, Tor.
Jan. 1993
181. Horizon's Conference, Secondary School Workshop, invited speaker, Toronto,
Ont. Feb. 1993
182. 18th Annual Aquatic Toxicity Workshop, Toronto, Ont. October 1991, session
chairperson.
183. International Association of Great Lakes Research, Buffalo, NY. June 1991
184. Water Resources Branch Seminar. Kempenfelt, Ontario. February 21, 1991.
185. Workshop on the Development of Biological Sediment Quality Guidelines,
Cambridge, Ont. January 23-24, 1991.
186. 17th Aquatic Toxicology Conference, Vancouver B.C., November 1990
187. Teachers Making a Difference. International Joint Commission Live-by-satellite
television conference. November 1990.
188. Environment Ontario Research Technology Transfer Conference, Toronto,
November 1990.
189. International Symposium on Ecosystem Health, Waterloo, Ont., July, 1990,
invited speaker
190. International Association of Great Lakes Research, Windsor, Ont., May 1990
191. Society of Canadian Limnologists, Ottawa, January 1990
192. Society of Environmental Toxicology and Chemistry (SETAC), Toronto, Nov.
1989
193. North American Benthological Society (NABS), Guelph, Ontario, May 1989
194. 15th Aquatic Toxicology Conference, Montreal, Nov. 1988
195. Environment Ontario Technology Transfer Conference, Toronto, Nov. 1989
196. Trace Metals in Lakes, Hamilton, Ontario, August 1988
197. First International Conference on Environmental Bioassay Techniques and their
Application, University of Lancaster, UK, November 1987.
198. Society of Environmental Toxicology and Chemistry Annual Conference,
Pensacola, Florida, Nov. 1987
199. North American Benthological Society Annual Conference, Orono, Maine, June
1987
200. 70th Chemical Society Congress, Quebec City, June 1987
201. Shield Lakes Acidification Network (SLANT), Queen's University, Apr. 1986

202. International Conference on Heavy Metals in the Environment, Athens, Sept.
1985
203. International Conference on Heavy Metals in the Environment, Heidelberg, Sept.
1983