

## APPENDIX F – Publications, Conference Proceedings and Presentations

### Journal Publications - 2014

- Allen, D.M., Bayer, P., **Ferguson, G.** and Blum, P. 2014. Hydrogeology of shallow thermal systems. *Hydrogeology Journal*, 22: 1-6. Springer/International Association of Hydrogeologists.
- Amarakoon, I.D., Zvomuya, F., Degenhardt, D., **Cessna, A.J.**, Larney, F.J. and McAllister, T.A. 2014. Runoff losses of chlortetracycline, sulfamethazine and tylosin from surface-applied and soil-incorporated feedlot manure. *Journal of Environmental Quality*, 43: 549-557.
- Arciszewski, T.J., Farwell, A.J., Servos, M.R., **Jardine, T.D.** and Munkittrick, K.R. 2014. Differential recovery of delta13C in multiple tissues of white sucker across age classes after the closure of a pulp mill. *Canadian Journal of Fisheries and Aquatic Sciences*, 71: 747-755.
- Asadzadeh, M., **Razavi, S.**, Tolson, B.A., Fay, D. and Fan, Y. 2014. Pre-emption Strategies for Efficient Multi-objective Optimization: Application to the development of Lake Superior Regulation Plan. *Environmental Modelling and Software*.
- Asong, Z.E., Khaliq, M.N., Wheeler, H.S.** 2014. Regionalization of precipitation characteristics in the Canadian Prairie Provinces using large-scale atmospheric covariates and geophysical attributes. *Stochastic Environmental Research and Risk Assessment*, DOI 10.1007/s00477-014-0918-z.
- Bañuelos, G. S., Arroyo, I., **Pickering, I. J.**, Yang, S. I. and Freeman, J. L. Selenium biofortification of broccoli and carrots grown in soil amended with Se-enriched hyperaccumulator *Stanleya pinnata*. *Food Chemistry*, published online 23 June 2014. DOI: 10.1016/j.foodchem.2014.06.071.
- Beitel, S.C., Doering, J.A., Patterson, S.E., **Hecker, M.** 2014. Assessment of the sensitivity of three North American fish species to disruptors of steroidogenesis using in vitro tissue explants. *Aquatic Toxicology*, 152: 273-283.
- Bharadwaj, L.** 2014. A framework for building research partnerships with first nations communities. *Environ Health Insights*. 2014 May 8: 8:15-25. doi: 10.4137/EHI.S10869. eCollection 2014.10 pages.
- Carr, M., Lacho, C., Pollock, M., Watkinson, D. and **Lindenschmidt, K.-E.** 2014 A first tier desktop approach for identifying lake sturgeon (*Acipenser fulvescens*) habitat in the Saskatchewan River System. *River Systems*, (online first): 1-14. <http://dx.doi.org/10.1127/1868-5749/2014/0086>.
- Chakraborty, P., Manek, A., Niyogi, S., **Hudson, J.** 2014. Determination of Dynamic Metal Complexes and their Diffusion Coefficients in the Presence of Different Humic Substances by Combining Two Analytical Techniques. *Analytical Letters*, 47: 1-18.
- Chandler, R.E., Isham, V.S., Northrop, P.J., **Wheater, H.S.**, Onof, C.J., Leith, N.A. 2014. Uncertainty in Rainfall Inputs. *Applied Uncertainty Analysis for Flood Risk Management*, Edited by: Beven, K.; Hall, J.; Pages: 101-152. Book DOI: 10.1142/p588.
- Chang, W.**, Ghoshal, S., 2014. Respiratory quotients as a useful indicator of the enhancement of petroleum hydrocarbon biodegradation in field-aged contaminated soils in cold climates. *Cold Regions Science and Technology*, 106-107 (2014) 110-119.
- de Lafontaine, Y., Beauvais, C., **Cessna, A.J.**, Gagnon, P., Hudon, C. and Poissant, L. 2014. Sulfonylurea herbicides in an agricultural catchment and its adjacent wetland in the St. Lawrence River basin. *Journal of the Total Environment*, 479-480: 1-10.
- Debeer, C.M.** and **Wheater, H.S.** 2014. Observation, diagnosis, and prediction of environmental change in northwestern Canada: First annual general meeting of the changing cold regions network; Saskatoon, Saskatchewan, Canada, 21-23 October 2013. *Eos*, 95(11), 18 March: 98.
- Dockrey, J.W., **Lindsay, M.B.J.**, Mayer, K.U., Beckie, R.D., Norlund, K.L.I., Warren, L.A. and Southam, G. 2014. Acidic microenvironments in waste rock characterized by neutral drainage: Bacteria-mineral interactions at sulfide surfaces. *Minerals* 4: 170-190. DOI:10.3390/min4010170.

- Doering, J.A., Wiseman, S., Beitel, S.C., **Giesy, J.P.** and **Hecker, M.** 2014. Identification and Expression of Aryl Hydrocarbon Receptors (AhR1 and AhR2) Provide Insight in an Evolutionary Context Regarding Sensitivity of White Sturgeon (*Acipenser transmontanus*) to Dioxin-Like Compounds. *Aquatic Toxicology*, 150: 27–35.
- Doig, L.E.**, Schiffer, S. and **Liber, K.** Reconstructing the ecological impacts of eight decades of mining, metallurgical and municipal activities on a small boreal lake in northern Canada. *Integrated Environmental Assessment and Management*, (Accepted June 2014).
- Dupont, D., Waldner, C., **Bharadwaj, L.**, Plummer, R., Carter, B., Cave, K., and Zagozewski, R. 2014. Drinking Water Management: Health Risk Perceptions and Choices in First Nations and Non-First Nations Communities in Canada. *International Journal of Environmental Research and Public Health* 2014, 11: 5889-5903; doi:10.3390/ijerph110605889 *International Journal of Environmental Research and Public Health* ISSN 1660-4601 www.mdpi.com/journal/ijerph.
- Elliott, J.A.** and **Cessna, A.J.** 2014. Variability on the distribution and dissipation of the herbicide thifensulfuron-methyl in a prairie wetland. *Journal of Soil and Water Conservation* 69: 151-159.
- Ferguson, G.** 2014. Issue Paper: Deep Injection of Waste in the Western Canada Sedimentary Basin. *Groundwater*: Article first published online: 19 MAY 2014 | DOI: 10.1111/gwat.12198. Wiley/National Groundwater Association.
- Ferguson, G.** 2014. Screening for Heat Transport by Groundwater in Closed Geothermal Systems. *Groundwater*: Article first published online: 17 JAN 2014 | DOI: 10.1111/gwat.12162. Wiley/National Groundwater Association.
- Ferguson, G.** and Grasby, S.E. 2014. The geothermal potential of the basal clastics of Saskatchewan, Canada. *Hydrogeology Journal*, 22: 143:150. Springer/International Association of Hydrogeologists.
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- Gaumont-Guay, D., **Black, T.A.**, **Barr, A.G.**, Griffis, T.J., Jassal, R.S., Krishnan, P., Grant, N. and Nesic, Z. 2014. Eight years of forest-floor CO<sub>2</sub> exchange in a boreal black spruce forest: spatial integration and multi-temporal trends. *Agricultural and Forest Meteorology*, 184: 25-35.
- Ge, L.-C, Chen, Z.-J., Liu, H.-Y., Zhang, G., Liu, H., Wei, W., Chen, X.-H., Wong, C.K.C., **Giesy, J.P.**, Du, J., Wang, H.-S. 2014. Involvement of Activating ERK1/2 Through G Protein Coupled Receptor 30 and Estrogen Receptor  $\alpha/\beta$  in Low Doses of Bisphenol A Promoting Growth of Sertoli TM4 Cells. *Toxicology Letters*, 226:81-89.
- Giesy, J.P.**, Solomon, K.R., Mackay, D., Giddings, J.M., Williams, W.M., Moore, D.R.J., Purdy, J. and **Cutler, G.C.** 2014. Ecological risk assessment for chlorpyrifos in terrestrial and aquatic systems in the United States – overview and conclusions. *Reviews of Environmental Contamination and Toxicology*, 231: 1-12.
- Gober, P.**, **Strickert, G.E.**, **Clark, D.A.**, **Chun, K.P.**, **Payton, D.** and **Bruce, K.** 2014. Divergent perspectives on water security: Bridging the policy debate. *The Professional Geographer*, DOI: 10.1080/00330124.2014.883960.
- Gober, P.** and **Wheater, H.S.** 2014. Socio-hydrology and the science-policy interface: A case study of the Saskatchewan River Basin. *Hydrology and Earth System Sciences*, 18: 1423-1422.
- Guo, R., Wilson, L., **Bharadwaj, L.** 2014. Uptake of chloroform from aqueous solution with synthetically engineered copolymer materials. *Topological and Supramolecular Polymer Science*, 1(1): 42-59.
- Haghnegahdar, A., Tolson, B.A., **Davison, B.**, Seglenieks, F.R., Klyszejko, E., Soulis, E.D., Fortin, V. and Matott, L. S. 2014. Calibrating Environment Canada's MESH Modelling System over the Great Lakes Basin. *Atmosphere-Ocean*, 58(6): 1-13. DOI: 10.1080/07055900.2014.939131.

- Harder, P. and **Pomeroy, J.W.** 2014. Hydrological model uncertainty due to precipitation-phase partitioning methods. *Hydrological Processes*, DOI: 10.1002/hyp.10214.
- Hassanzadeh, E., **Elshorbagy, A., Wheeler, H. and Gober, P.** 2014. Managing water in complex systems: An integrated water resources model for Saskatchewan, Canada. *Journal Environmental Modelling & Software*, 58: 12-26.
- Henderson, A., **Reed, M.G.** and Davis, S. 2014. Voluntary Stewardship and the Canadian Species at Risk Act: Exploring Rancher Willingness to Support Species At Risk in the Canadian Prairies. *Human Dimensions of Wildlife*, 19:1: 17-32, DOI: 10.1080/10871209.2013.819595.
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- Hu, W., She, D., Shao, M., **Chun, K.P.** and **Si, B.C.** 2014. Effects of initial soil water content and saturated hydraulic conductivity variability on small watershed runoff simulation using LISEM. *Hydrological Sciences Journal*, (doi: 10.1080/02626667.2014.903332).
- Hudson, J.** 2014. Relationship between water quality parameters and bacterial indicators in a large prairie reservoir: Lake Diefenbaker, SK, Canada. *Canadian Journal of Microbiology*, 60(4): 243-249.
- Truong, H-Y.T., Chen, Y-W., Saleh, M., Nehzati, S., **George, G. N., Pickering, I. J.** and Belzile, N. Proteomics of *Desulfovibrio desulfuricans* and X-ray absorption spectroscopy to investigate mercury methylation in the presence of selenium. *Metallomics*, 6(3): 465-475 (2014). DOI: 10.1039/C3MT00323J.
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- Jardine, T.D.,** Hadwen, W.L., Hamilton, S.K., Hladyz, S., Mitrovic, S.M., Kidd, K.A., Tsoi, W.Y., Spears, M., Westhorpe, D.P., Fry, V.M., Sheldon, F. and Bunn, S.E. 2014. Understanding and overcoming baseline isotopic variability in running waters. *River Research and Applications*, 30: 155-165.
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10.1080/02508060.2014.865300 Published on Line December 13th, 2013.  
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- Kidd, K.A., Paterson, M.J., Rennie, M.D., Podemski, C.L., Findlay, D.L., Blanchfield, P.J. and **Liber, K.** 2014. Responses of a freshwater food web to a potent synthetic estrogen. Special issue, Philosophical Transactions of the Royal Society B on Pharmaceuticals in the Environment (Accepted June 2014).
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- Wheater, H.S.** and **Gober, P.** 2013. Water security in the Canadian prairies: Science and management challenges. *Philosophical Transactions of the Royal Society A*, 371: 20120409.
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- Zha, T.S., **Barr, A.G.**, Bernier, P.-Y., Lavigne, M.B., Trofymow, J.A., Amiro, B.D., Arain, M.A., Bhatti, J.S., **Black, T.A.**, Margolis, H.A., McCaughey, J.H., Xing, Z.S., Van Rees, K.C.J., Coursolle, C. 2013. Gross and

aboveground net primary production at Canadian forest carbon flux sites. *Agricultural and Forest Meteorology*, 174–175: 54–64.

Zhou, J., Zhang, W., **Pomeroy, J.W.**, Cheng, G., Wang, G., Chen, C. and Li, H. 2013. Simulating the Cold Regions Hydrological Processes in Northwest China with Modular Modeling Method. *Journal of Glaciology and Geocryology*, 35(2): 389-400.

Zhu, Y., Wu, F.-C., He, Z.-Qi., Guo, J.-Y., Qu, X.-X., Xie, F.-., **Giesy, J.P.**, Liao, H.-Q. and Guo, F. 2013. Characterization of organic phosphorus in lake sediments by sequential fractionation and enzymatic hydrolysis. *Environmental Science & Technology*, 47: 7679-7687.

#### Conference Proceedings and Presentations - 2014

Alam, S., **Nazemi, A.** and **Elshorbagy, A.** 2014. Quantifying the Climate Change-induced Variations in Saskatoon's Intensity-Duration-Frequency Curves Using Stochastic Rainfall Generators and K-nearest neighbors. General Assembly of the European Geosciences Union, Vienna, Austria, April 27 – May 2 (Poster presentation EGU2014-4536).

**Asong, Z.E., Khaliq, M.N., Wheeler, H.S., Chun, P.K. and Masud, M.B.** 2014. Multivariate multi-site stochastic modelling of weather variables using generalized linear models. Canadian Meteorological and Oceanographic Society (CMOS) Conference, Rimouski, QC, Canada: June 1-5 (Presentation).

**Bam, E., Ireson, A.M., and van der Kamp, G.** 2014. Stable isotopic composition of precipitation, evaporated pond water, surficial and inter-till aquifer units in southeastern Saskatchewan, Canada. Canadian Geophysical Union Meeting in Banff, AB, May.

Bartlett, P., Mackay, M., **Davison, B.** and **Ireson, A.M.** 2014. Changing Cold Regions Network Baseline Simulations Project. Canadian Geophysical Union Meeting in Banff, AB, May.

**Baulch, H.M., North, R.L. and Hudson, J.** 2014. Biogeochemical changes during ice cover in prairie potholes. Joint Aquatic Sciences Meeting (SFS, ASLO, PSA, and SWS). Portland, Oregon, May.

**Baulch, H.M., North, R.L. and Hudson, J.J.** 2014. Biogeochemical changes during ice cover in prairie potholes. Presented at the Joint Aquatic Sciences Meeting (JASM), Portland, OR.

**Baulch, H.M., North, R.L., Cavaliere, E. and Hudson, J.** 2014. Biogeochemical changes during under ice in prairie potholes. Annual meeting of the Association for the Sciences of Limnology and Oceanography (ASLO), Portland, OR, May 18-23.

**Brannen, R., Spence, C., and Ireson, A.M.,** 2014. Influence of surface-groundwater connectivity on wetland storage and its control on streamflow response. Canadian Geophysical Union Meeting in Banff, AB, May.

Brown, C.D., **Johnstone, J.F.** and Velland, M. 2014. Anti-climatic: How biotic and abiotic factors can constrain climate-induced range expansion of trees. Genomes to Biomes: Canadian Society for Ecology and Evolution and Canadian Society of Zoologists joint conference, Montréal, QC, May (Oral presentation).

Buchanan, A. and **Reed, M.G.** 2014. The Influence of gender on adaptive capacity and transformation: A case study from a Swedish reindeer herding community. Resilience and Development: Mobilizing for Transformation. Third International Science and Policy Conference on the Resilience of Social & Ecological Ecosystems, “Resilience and Development: Mobilizing for Transformation” Le Corum: Montpellier, France. May 4-8 (Presentation May 7).

Carbone, R.E. and **Li, Y.** 2014: Lower Boundary Forcing related to Occurrence of Rain in the Tropical Western Pacific, 94<sup>th</sup> American Meteorology Society Annual Meeting, Atlanta, GA, February 2-6.

- Cavalaro, M., **Morrissey, C.** and **Liber, K.** 2014. Effects of neonicotinoid insecticides on aquatic insect emergence in prairie wetlands. Society of Environmental Toxicology and Chemistry Prairie Northern Chapter 5<sup>th</sup> Annual Meeting, Saskatoon, SK, June 6.
- Cavaliere, E., Baulch, H., Chun, S.** 2014. Winter biogeochemical changes in an intensively monitored reservoir. Joint Aquatic Sciences Meeting (SFS, ASLO, PSA, and SWS). Portland, OR, May.
- Chang, W.** 2014. Cold Region Bioremediation: Part 1 – Emergence of polyextremophilic hydrocarbon-degrading bacteria and enhanced biodegradation in freezing contaminated soils. 37<sup>th</sup> Arctic and Marine Oilspill Program (AMOP) Technical Seminar on Environmental Contamination and Response, Canmore, AB, June 3-5 (Poster presentation).
- Chang, W.** 2014. The substrate, temperature and unfrozen water dependency of microbial respiration activity during bioremediation in petroleum hydrocarbon-contaminated freezing soils. 2014 CPANS Annual Conference and General Meeting – “Energy and Environment Sustainability: Share the Think, Share the Future”, Canadian Prairie & Northern Section of the Air & Waste Management Association, Edmonton, AB, May 22-23 (Oral presentation).
- Crawford, S. and **Liber, K.** 2014. Formulated lab vs. field sediment: Bioavailability of spiked uranium to *Chironomus dilutus*. 21<sup>st</sup> Annual University of Saskatchewan Health and Life Sciences Research Day, Saskatoon, SK, March 14 (2<sup>nd</sup> place, Student poster competition).
- Crawford, S.E. and **Liber, K.** 2014. Gaps in sediment quality guidelines: Incorporation of sediment physicochemical characteristics in assessing uranium bioavailability. Society of Environmental Toxicology and Chemistry – Europe 24<sup>th</sup> Annual Meeting, Bazel, Switzerland, May 11-15.
- Crawford, S.E. and **Liber, K.** 2014. Influence of sediment modifying factors on uranium bioaccumulation to the freshwater midge, *Chironomus dilutus*. Society of Environmental Toxicology and Chemistry Prairie Northern Chapter 5<sup>th</sup> annual meeting, Saskatoon, SK, June 6 (1<sup>st</sup> place, Student poster competition).
- Crawford, S.E. and **Liber, K.** 2014. Influence of sediment modifying factors on uranium bioaccumulation in the freshwater midge, *Chironomus dilutus*. Society of Environmental Toxicology and Chemistry – Europe 24<sup>th</sup> Annual Meeting, Bazel, Switzerland, May 11-15.
- Delavau, C.J., **Chun, K.P.**, Stadnyk, T.A., Birks, S.J. and Welker, J.M. 2014. Time-series Oxygen-18 Precipitation Isoscapes for Canada and the Northern United States, European Geosciences Union (EGU) General Assembly (For this presentation, C. J. Delavau received a best poster award from EGU).
- Dockrey, J.W., **Lindsay, M.B.J.**, Mayer, K.U., Beckie, R.D., Norlund, K.L.I, Warren, L.A. and Southam, G. 2014. Bacteria-mineral interactions at sulfide surfaces in carbonate-rich waste rock. Proceedings of the 24<sup>th</sup> V.M. Goldschmidt Conference, Sacramento, USA, June 8–13, Goldschmidt Abstracts, 568.
- Egunyu, F. and **Reed, M.G.** 2014. Collaborative forest governance of a community forest in western Canada: What is the role of social learning? XXIV IUFRO (International Union of Forest Research Organizations) World Congress 2014. “Sustaining Forests, Sustaining People: The Role of Research” Salt Lake City, UT, October 5-11.
- Egunyu, F. and **Reed, M.G.** 2014. Participation in collaborative forest governance in Canada and Uganda: who has access and what do they learn? 20<sup>th</sup> International Symposium on Society and Resource Management (ISSRM), Hannover, Germany, June 9-13.
- Elshorbagy, A.** 2014. The effect of water supply uncertainty and policy change on integrated water resource systems. 6<sup>th</sup> IAHS-EGU International Symposium on Integrated Water Resources Management, Bologna, Italy, June 4-6 (Oral presentation).

- Elshorbagy, A., Hassanzadeh, E., Wheeler, H., and Gober, P.** 2014. The effect of water supply uncertainty and policy change on integrated water resource systems. 6<sup>th</sup> IAHS-EGU International Symposium on Integrated Water Resources Management, Bologna, Italy, June 4-6 (Abstract and oral presentation).
- Elshorbagy, A., Hassanzadeh, E., Wheeler, H., and Gober, P.** 2014. The effect of water supply uncertainty and policy change on integrated water resource systems. 6<sup>th</sup> IAHS-EGU International Symposium on Integrated Water Resources Management, Bologna, Italy, June 4-6 (Abstract & oral presentation).
- Galuschik, N., Baulch, H.M.** 2014. Agricultural dams and ponded areas: How do sediments affect phosphorus chemistry? Joint Aquatic Sciences Meeting (SFS, ASLO, PSA, and SWS). Portland OR, May.
- Gillio Meina, E. and **Liber, K.** 2014. Acute toxicity of vanadium to *Daphnia pulex* under different water chemistry conditions representative of surface waters in the Athabasca oil sands region. Society of Environmental Toxicology and Chemistry Prairie Northern Chapter 5<sup>th</sup> Annual Meeting, Saskatoon, SK, June 6.
- Godmaire, H. and **Reed, M.G.** 2014. Pratiques, Collaboration et Stratégies: Réserves de la biosphere et developpement durable. August 21.
- Gooding, R.M., Baulch, H. M.** 2014. Agricultural reservoirs: hotspots of denitrification. Joint Aquatic Sciences Meeting (SFS, ASLO, PSA, and SWS). Portland, OR, May.
- Hassanzadeh, E., Elshorbagy, A., Nazemi, A., and Wheeler, H.** 2014. Performance Assessment of Saskatchewan's Water Resource System Under Uncertain Inter-provincial Water Supply. General Assembly of the European Geosciences Union, Vienna, Austria, April 27- May 2 (Poster presentation EGU2014-4731).
- Hecker, M.** Lettieri, T., Villeneuve, D.L., Crump, D., Hutchinson, T., LaLone, C., Landesmann, B., Munn, S., Nepelska, M., Ottinger, M., Vergauwen, L. and Whelan, M. 2014. Strategic approaches to adverse outcome pathway development. SETAC Europe 24<sup>th</sup> Annual Meeting, Basel, Switzerland, May 11-15.
- Hecker, M., Beitel, S., Doering, J.A. and Patterson, S.** 2014. Development of an In Vitro Approach to Assess Disruption of Steroidogenesis in Native Fish Species. SETAC Europe 24<sup>th</sup> Annual Meeting, Basel, Switzerland, May 11-15.
- Hecker, M., Doering, J.A., Wiseman, S.B., Beitel, S., Patterson, S. and Giesy, J.P.** 2014. Transcriptional responses of white sturgeon (*Acipenser transmontanus*) following exposure to a model dioxin-like compounds. SETAC Europe 24<sup>th</sup> Annual Meeting, Basel, Switzerland, May 11-15.
- Hecker, M., Doering, J.A., Farmahin, R., Wiseman, S.B., Beitel, S., Kennedy, S. and Giesy, J.P.** 2014. Predicting the Sensitivity of Endangered Sturgeons to Dioxin-like Compounds: Molecular Investigation into the Aryl Hydrocarbon Receptor Pathway. SETAC Europe 24<sup>th</sup> Annual Meeting, Basel, Switzerland, May 11-15.
- Hecker, M., Nuesser, L., Hug, C., Brack, W., Wiseman, S.B., Seiler, T., Hollert, H., Patterson, S. and Zee, J.** 2014. Assessment of the toxicogenomic potential of complex industrial wastewater effluents from a treatment plant in Germany. SETAC Europe 24<sup>th</sup> Annual Meeting, Basel, Switzerland, May 11-15.
- Henderson, A., Lamb, E., Davis, S., and **Reed, M.G.** 2014. Modeling Social and Ecological Drivers of Abundance for Three Grasslands Birds and Risk. Pathways 2014: Integrating Human Dimensions into Fish and Wildlife Management, Estes Park, Colorado, October 5-9.
- Ireson, A.M.** 2014. A capillary bundle model for soil freeze-thaw. Canadian Geophysical Union Meeting in Banff, AB, May.
- Janz, D.M.** and Thomas, J.K. 2014. Fish as models for investigating metabolic disruption arising from dietary selenium over-supplementation. Society of Toxicology, Phoenix, AZ.



- Janz, D.M., Jardine, T., Baulch, H.,** Weber, L.P., Steeves, K., Keeping, D., Bast, M. and West, R. 2014. Spatial and temporal variation in fish condition and energy stores during flooding in the Saskatchewan River. NSERC HydroNet Symposium, Burnaby, BC.
- Jardine, T., Baulch, H., Janz, D.M.,** Weber, L.P., Steeves, K., Keeping, D., Bast, M. and West, R. 2014. Biological response to flooding in the Saskatchewan River. Canadian Conference for Fisheries Research, Yellowknife, NT.
- Jardine, T., Baulch, H., Janz, D.,** Weber, L., Steeves, K., Keeping, D., Bast, M. and West, R. 2014. Biological response to flooding in the Saskatchewan River. Society of Canadian Limnologists, Yellowknife, NWT, January.
- Jean, M., **Johnstone, J.F.,** Alexander, H. and Mack, M.C. 2014. How does variation in moss communities and functional traits influence successional trajectories among deciduous, coniferous, and mixed stands in Alaska? Genomes to Biomes: Canadian Society for Ecology and Evolution and Canadian Society of Zoologists Joint Conference, Montréal, QC, May 2014 (Oral presentation).
- Johnstone, J.F.,** Brown, C.D. and Kuleza, S. 2014. At the burning edge: Potential tree recruitment after fire at high latitude treelines. Genomes to Biomes: Canadian Society for Ecology and Evolution and Canadian Society of Zoologists Joint Conference, Montréal, QC, May 2014 (Oral presentation).
- Kim, J. and **Chang, W.** 2014. Cold Region Bioremediation: Part 2 – The substrate, temperature and unfrozen water dependency of microbial respiration during bioremediation in freezing contaminated soils. 37<sup>th</sup> Arctic and Marine Oilspill Program (AMOP) Technical Seminar on Environmental Contamination and Response, Canmore, AB, June 3-5 (Poster presentation).
- Kim, J. and **Chang, W.** 2014. Site remediation in northern climates: microbial respiration models for petroleum hydrocarbon-contaminated soils at low temperatures. 67<sup>th</sup> Canadian Geotechnical Conference proceedings, GeoRegina 2014, Regina, SK, Sept. 28-Oct. 1 (Accepted).
- Lankshear, J., Lokken, N., Hausner, V., Broderstad, E. and **D. Clark.** 2014. Challenged by corporations: local perspectives on land use and natural resource management in Churchill, Manitoba. International Congress of Arctic Social Sciences VIII, May 23, Prince George, BC.
- Li, M., **Barbour, S.L., Si, B.C.** 2014. Measuring the solid percentage of oil sands mature fine tailings using the heat pulse dual probe metho. , CGU-CSS 2014, Joint Canadian Geophysics Union & Canadian Society of Soil Science Annual Meeting, Poster Session C8, Banff, AB, May 6.
- Li, Y.** 2014: Precipitation and regional climate processes for BERMS area, BERMS Research Workshop, National Hydrology Research Center, Saskatoon, SK, April 28-29.
- Li, Y.,** Elsaesser, G., Carbone, R.E. and Kummerow, C. 2014: Characteristics of the precipitation event life cycle in the tropical western Pacific, 94<sup>th</sup> American Meteorology Society Annual Meeting, Atlanta, GA, February 2-6.
- Li, Y.,** Sezto, K., Stewart, R. and Theriault, J. 2014: WRF Model Simulation of June 2013 Alberta Flooding Event, Workshop on Extreme Weather and Hydrology - Lessons Learned from the Western Canadian Floods of 2013 and Others, Canmore, AB, February 11-12.
- Liber, K.,** Carter, C., Townsend, M. and Wang, X. 2014. Analysis of river otter (*Lontra canadensis*) livers and kidneys from northern Saskatchewan for metals and trace elements via ICP-MS: 2013 samples. Report for Saskatchewan Environment, Regina, SK.
- Masud, M.B., Khaliq, M.N., Wheeler, H.S. and Asong, Z.E.** 2014. Probabilistic Characterization of Meteorological Droughts for the Saskatchewan River Basin. Canadian Meteorological and Oceanographic Society (CMOS) Conference, Rimouski, QC, June 1–5 (Presentation).

- Matthies, R., **Lindsay, M.B.J.**, Blowes, D.W. and Ptacek, C.J. 2014. Zinc isotope partitioning in organic-substrate amended mine tailings. Proceedings of the 24<sup>th</sup> V.M. Goldschmidt Conference, Sacramento, CA, June 8–13, Goldschmidt Abstracts, 1624.
- Mahmood, T. H., Pomeroy, J. W., Wheeler, H. S., Baulch, H. M. and Elliott, J.A.** 2014. Understanding the influence of cold region processes on nutrient exports from a prairie agricultural basin Canadian Geophysical Union, Banff, AB, May.
- Mekonnen, M., Wheeler, H.S., Ireson, A.M., Spence, C., Davison, B., and Pietroniro, A.** 2014. A Variable Contributing Area Surface Runoff Generation Scheme for Prairie Landscapes. Canadian Geophysical Union Meeting in Banff, AB, May.
- Mohammadzadeh, O. and **Giesy, J.P.** 2014. Preliminary Investigation into the Application of IPC Technology for Oil Recovery Using Chemical-Assisted Waterflooding Process. World Heavy Oil Congress, New Orleans. LA, March 5-7.
- Nazemi, A. and Elshorbagy, A.** 2014. A Stochastic Disaggregation Algorithm for Analysis of Change in the Sub-daily Extreme Rainfall. General Assembly of the European Geosciences Union, Vienna, Austria, April 27 - May 2 (Poster presentation EGU2014-7827).
- Nazemi, A., Alam, Md. S. and Elshorbagy, A.** 2014. Uncertainties in future projections of extreme rainfall: The role of climate model, emission scenario and randomness, In Proceedings of HIC 2014, 11<sup>th</sup> International Conference on Hydroinformatics, New York, NY, August 17-21, (CD-ROM).
- North, R. L., Baulch, H., Vandergucht, D., Sereda, J., Lindenschmidt, K. E., Guildford, S., Davies, J. M., and Hudson, J.** 2014. The interacting effects of light and nutrients on under-ice phytoplankton populations. Annual meeting of the Association for the Sciences of Limnology and Oceanography (ASLO). Portland, OR. May 18-23.
- North, R.L., Baulch, H.M., Vandergucht, D., Sereda, J., Lindenschmidt, K., Guildford, S.J., Davies, J.M., Hudson, J.J.** The interacting effects of light and nutrients on under-ice phytoplankton populations. Presented at the Joint Aquatic Sciences Meeting (JASM) 2014, Portland, OR.
- North, R. L., Baulch, H., Vandergucht, D., Sereda, J., Lindenschmidt, K.E., Guildford, S., Davies, J.M. and Hudson, J.** 2014. The interacting effects of light and nutrients on under-ice phytoplankton populations. Joint Aquatic Sciences Meeting (SFS, ASLO, PSA, and SWS). Portland, OR, May.
- Pan, X., Helgason, W., and Ireson, A.M.,** 2014. An efficient calibration technique for heat dissipation matric water potential sensors. Canadian Geophysical Union Meeting in Banff, AB, May.
- Pan, X., Peterson, A., Merriam, J., Helgason, W., and Ireson, A.M.,** 2014. Characterization of sub-field-scale hydrological processes in the non-drainage area of the Brightwater Creek sub-basin. Canadian Geophysical Union Meeting in Banff, AB, May.
- Peterson, A., Helgason, W., and Ireson, A.M.,** 2014. An evaluation of a cosmic-ray neutron probe and point upscaling methods to provide accurate field average soil moisture estimations. Canadian Geophysical Union Meeting in Banff, AB, May.
- Ponomarenko, Y., **Hunter, K., Abirhire, O., Prestie, C. and Hudson, J.** 2014. Photoammonification in Boreal and Plains Lakes. Genomes to Biomes Conference (joint meeting of the Society of Canadian Limnologists (SCL), the Canadian Society of Ecology & Evolution (CSEE) & the Canadian Society of Zoology (CSZ). Montreal, QC, May 25-29.
- Prestie, C., Hudson, J. and Sereda, J.** 2014. Carbon sources supporting native and naturalized fish populations in a large central Saskatchewan reservoir. Genomes to Biomes Conference (joint meeting of the Society of Canadian Limnologists (SCL), the Canadian Society of Ecology & Evolution (CSEE) & the Canadian Society of Zoology (CSZ). Montreal, QC, May 25-29.

- Prestie, C., Sereda, J. and Hudson, J.** 2014. Carbon sources supporting fish growth in Lake Diefenbaker, Saskatchewan. Annual Meeting of the Prairie University Biology Symposium (PUBS). Regina, SK, February 20-22.
- Razavi, S., Elshorbagy, A., Wheeler, H., and Saushyn, D.** 2014. On the Reconstruction of Paleo-hydrology: A Foundation for More Reliable Water Resources Management. General Assembly of the European Geosciences Union, Vienna, Austria, April 27- May 2 (Poster presentation EGU2014-7971).
- Reed, M.G.** 2014. Linking gender, climate change, adaptive capacity, and Canadian forest-based communities. Gender Forum. Diefenbaker Canada Centre. University of Saskatchewan, Saskatoon, SK, May 27.
- Reed, M.G.** and Godmaire, H. 2014. Promoting transformational change by strengthening a national community of practice: Experiences of a partnership with Canadian biosphere reserves. Third International Science and Policy Conference on the Resilience of Social & Ecological Ecosystems, "Resilience and Development: Mobilizing for Transformation" Le Corum: Montpellier, France. May 4-8 (Presentation May 5).
- Reed, M.G.,** Johnston, M. and Natcher, D. 2014. Gender and the challenge of preparing for climate change in Canadian forest-based communities. XXIV IUFRO (International Union of Forest Research Organizations) World Congress 2014. "Sustaining Forests, Sustaining People: The Role of Research" Salt Lake City, UT, October 5-11.
- Rosamond, M.S., Venkiteswaran, J.J., **Baulch, H.M.,** Cummings, T.F., Schiff, S.L. 2014. Seasonal N<sub>2</sub>O:NO<sub>3</sub>-relationships and stream order in Southern Ontario: Implications for greenhouse gas measurement and management strategies. International Association for Great Lakes Research. Hamilton, ON, May.
- Roste, J., Pomeroy, J.W., Wheeler, H.S., Baulch, H., Elliott, J., Mahmood, T.H.** 2014. Informing Canadian Prairie nutrient transfer model development with edge of field hydrochemistry observations Canadian Geophysical Union, Banff, AB, May.
- Sagin, J., Sizo, A., Wheeler, H., Jardine, T. and Lindenschmidt, K.-E.** 2014. Surface water coverage of an inland delta in a regulated river basin. Spatial Knowledge and Information Canada conference, Canadian GIS Association, February 7-9, Banff, AB.
- Sampson, D.A., Quay, R., White, D.D. and **Gober, P.** 2014. WaterSim: A brief history. 16th Annual CAP LTER Poster Symposium and All Scientists Meeting 2014, January 17, SkySong, Scottsdale, AZ, (Poster presentation).
- Sampson, D.A., R. Quay, D.D. White, and **P. Gober.** 2014. WaterSim: a brief history. Water Resources Research Center 2014 Annual Conference: Closing the Gap Between Water Supply and Demand, April 8, University of Arizona, Tucson, AZ (Poster presentation).
- Saunders, D.M.V., Wiseman, S. and **Giesy, J.P.** 2014. Three Novel Brominated Flame Retardants Affect Fecundity and Transcript Profiles of the HPGL in Japanese Medaka. 14<sup>th</sup> Annual Workshop on Brominated & Other Flame Retardants (BFR). Indianapolis, IN, June 22-24.
- Schiffer, S.R., Doig, L.E. and Liber, K.** 2014. Standard vs. field-relevant species: Investigating the toxicity of vanadium to freshwater invertebrates and green algae. Society of Environmental Toxicology and Chemistry Prairie Northern Chapter 5<sup>th</sup> annual meeting, Saskatoon, SK, June 6.
- Schiffer, S.R., Doig, L.E., and Liber, K.** 2014. Acute and chronic toxicity of aqueous vanadium to model and field collected planktonic and benthic invertebrates. Global Institute of Water Security and Canadian Water Resources Association World Water Day Conference, Saskatoon, SK, March 21 (2<sup>nd</sup> place, student poster competition).

- Sizo, A., Bell, S., and **Noble, B.F.** 2014. Automated GIS routine for Strategic Environmental Assessment: a spatiotemporal analysis of urban and wetland change. Proceedings of Spatial Knowledge and Information Canada, vol. 2 (8pgs).
- Small, G., **Baulch, H.**, Bechtold, H., Holzer, K., Newell, S. and Vaquer Sunyer, R. 2014. Headwaters to estuaries: Complex responses to cultural eutrophication at the watershed scale. Eco-DAS IX Symposium Proceedings. Ed. Paul Kemp. In press.
- Steeves, J., Barbour, S.L.** and **Ferguson, G.** 2014. Water Flow and Heat Transfer in a Frozen Soil. Cold Covers 2014. Whistler, BC, April.
- Tse, T.J., Doig, L.E.**, Quiñones-Rivera, Z.J., Leavitt, P.R., Codling, G., **Lucas, B.T., Liber, K., Giesy, J.P., Wheeler, H.S.** and **Jones, P.D.** 2014. Reconstructing spatial and temporal changes in phytoplankton productivity in a narrow river-valley reservoir. Society of Environmental Toxicology and Chemistry Prairie Northern Chapter 5<sup>th</sup> annual meeting, Saskatoon, SK, June 6.

### Conference Proceedings and Presentations - 2013

- Alharbi, H., Wiseman, S.B.A. and **Giesy, J.P.**, dos Santos Pereira, A. and Martin, J.W. 2013. Fractionation and Characterization of Polar Organic Compounds in OSPW Using Mixed-mode Solid Phase Extraction Coupled to Mass Spectrometry (Orbitrap). SETAC North America 36<sup>th</sup> Annual Meeting, November 17-23.
- Azinfar, H., **Nazemi, A., Hassanzadeh, E., Elshorbagy, A.A.** and Hilderbrandt, A. 2013. The Vulnerability of Saskatoon's Storm Collection System to the Alteration in Future Rainfall Characteristics. Joint Congress of the CMOS, CGU, and CWRA, Saskatoon, SK, Canada, May 26-30, (Paper No. Abstract 6354).
- Baer, T. and **Barbour, S.L.** 2013. Evaluating the use of stable isotopes of water to characterize oil sands mine waste, GeoMontreal 2013 - Canadian Geotechnical Society Conference, Montreal, PQ, September 29-October 3.
- Brinkman, M., Hudjetz, S., Hennig, M., Kuckelkorn, J., Cofalla, C., Lorke, S., Kammann, U., **Hecker, M.**, Schuttrumpf, H., Schaffer, A., Hollert, H. and **Giesy, J.P.** 2013. Can flood events affect rainbow trout? The biomarker-cascade after exposure to PAHs in sediment suspension? SETAC Europe 23<sup>rd</sup> Annual Meeting, Glasgow, Scotland, May 12-16.
- Chang, W.**, Bioremediation in northern climates: can hydrocarbon biodegradation occur in contaminated cold soils at seasonal freeze-thaw temperatures? Proceedings of the 2013 Northern Latitudes Mining Reclamation Workshop and 38<sup>th</sup> Annual Meeting of the Canadian Land Reclamation Association, pp. 21-31, Whitehorse, YT, September 9-12.
- Crawford, S. and **Liber, K.** 2013. Formulated lab vs. field sediment: Bioavailability of spiked uranium to *Chironomus dilutus*. Society of Environmental Toxicology and Chemistry 34<sup>th</sup> Annual Meeting, Nashville, TN, November 17-21.
- Crawford, S.E. and **Liber, K.** 2013. Quantifying the importance of physicochemical sediment characteristics in altering uranium bioavailability in reconstituted vs. natural freshwater sediment. 40<sup>th</sup> annual Aquatic Toxicology Workshop, Moncton, NB, October 6-9.
- Codling, G., Jones, P.D.**, Vogt, A., Wang, T., Li, A., Sturchio, N., Wang, P., Lu, Y., Rockne, K.J., Ji, K., Khim, J., Naile, J.E. and **Giesy, J.P.** 2013. Historical Trends of Inorganic and Organic Fluorine in the North American Great Lakes. SETAC North America 36<sup>th</sup> Annual Meeting, November 17-23.
- Doering, J., Wiseman, S., Beitel, S., Vardy, D., Eisner, B., Reid, S., **Hecker, M.** and **Giesy, J.P.** 2013. Expression of Metallothionein in White Sturgeon (*Acipenser transmontanus*) Following in vitro and

- Chronic Exposure to Cadmium or Copper. 40<sup>th</sup> Annual Aquatic Toxicity Workshop Annual Meeting, Moncton, NB, October 6-9.
- Doering, J., Wiseman, S., Beitel, S., **Hecker, M.** and **Giesy, J.P.** 2013. The Aryl hydrocarbon Receptor Pathway of sturgeon: Evolutionary and ecotoxicological Implications to dioxin Sensitivity in fishes. 40<sup>th</sup> Annual Aquatic Toxicity Workshop. Annual Meeting, Moncton, NB, October 6-9.
- Doering, J., Wiseman, S., Beitel, S., Patterson, S., **Hecker, M.** and **Giesy, J.P.** 2013. Effects of Exposure to a Model Dioxin-like Compound on the Transcriptome of White Sturgeon (*Acipenser transmontanus*). 40<sup>th</sup> Annual Aquatic Toxicity Workshop Annual Meeting, Moncton, NB, October 6-9.
- dos Santos Pereira, A., Wiseman, S.B., Mankidy, R., He, Y., Alharbi, H., Martin, J.W. and **Giesy, J.P.** 2013. Characterization of the Toxic Constituents of Oil Sands Process Affected Water by Orbitrap-MS. SETAC Europe 23rd Annual Meeting, Glasgow, Scotland, May 12-16.
- Elsaesser, G., **Li, Y.**, Kummerow, C. and Carbone, R.E. 2013: Multi-Sensor observations of the lifecycles of propagating tropical convective systems: Rainfall characteristics, diabatic heating/moistening and relationship to environment parameters. AGU Fall Meeting, San Francisco, CA, December 9-13.
- Giesy, J.P.** 2013. A Tiered Risk Assessment of Pentachlorophenol Based on Chinese Species. International Conference on Environmental Safety and Ecological Criteria, Nanjing, PR China, June 30-July 2.
- Guo, J., Li, A., Corcoran, M., Rockne, K.J., Sturchio, N. and **Giesy, J.P.** 2013. Spatial Distribution and Time Trend of Selected Chlorinated and Brominated Compounds in the Sediments of Lake Michigan. SETAC North America 36<sup>th</sup> Annual Meeting, November 17-23.
- Haakensen, M., Pittet, V., **Liber, K., Doig, L.**, Castle, J. and Rodgers Jr, J. 2013. Assessing diversity of algae and cyanobacteria related to selenium uptake and consequent uptake by invertebrates. 2013 Annual North American Selenium Working Group Meeting, Nashville, TN, November 22.
- Harley, R., Carse, L., Hughes, D., Lynch, K., **Barbour, S.L.** 2013. An evaluation of strain softening of glacial tills as a result of pore pressure *dynamics*. GeoMontreal 2013, 66<sup>th</sup> Canadian Geotechnical Conference Proceedings.
- Hassanzadeh, E., Elshorbagy, A.A.** and **Wheater, H.** 2013. Scenario-based Water Resources Management Using the Water Value Concept. General Assembly of the European Geosciences Union, Vienna, Austria, April 7-12 (Paper No. EGU2013-1847).
- Hassanzadeh, E., Elshorbagy, A.A.** and **Wheater, H.** 2013. Value-based Water Resources Management Model: Application to the Saskatchewan River Basin. 2013 Joint Congress of the CMOS, CGU, and CWRA, Saskatoon, SK, May 26-30 (Paper No. Abstract 6393).
- Hassanzadeh, E., Nazemi, A.** and **Elshorbagy, A.A.** 2013. A Novel Quantile-Quantile Downscaling Approach to Updating IDF Curves in the City of Saskatoon. 2013 Joint Congress of the CMOS, CGU, and CWRA, Saskatoon, SK, May 26-30 (Paper No. Abstract 6352).
- He, Y., Wiseman, S.B., Mankidy, R., Alharbi, H. and **Giesy, J.P.** 2013. Assessing effects of dibenzothiophenes and related compounds on Aryl-hydrocarbon receptor antagonism and embryotoxicity to fathead minnow. SETAC North America 36<sup>th</sup> Annual Meeting, November 17-23.
- Hecker, M., Beitel, S.,** Doering, J. and Eisner, B. 2013. Use of vitellogenin gene expression in the assessment of the sensitivity of four native Canadian fish species to 17- $\alpha$  Ethinylestradiol, in vitro. 40<sup>th</sup> Aquatic Toxicity Workshop in Moncton, NB, October 6 - 9.
- Hecker, M., Beitel, S.,** Doering, J., Patterson, S. and Prodahl, H. 2013. Assessment of the disruption of steroidogenesis in three North American fish species by use of an in vitro gonadal explant assay. 40<sup>th</sup> Aquatic Toxicity Workshop, Moncton, NB, October 6-9.

- Hecker, M.**, Doering, J., Wiseman, S., **Beitel, S.**, Vardy, D., Eisner, B., Reid, S., and Giesy, J. 2013. Expression of metallothionein in white sturgeon (*Acipenser transmontanus*) following in vitro and chronic exposure to cadmium or copper. 40<sup>th</sup> Aquatic Toxicity Workshop in Moncton, NB, October 6 - 9.
- Hecker, M.**, **Zee, J.**, and Patterson, S. 2013. Molecular and Physiological Effects of Chronic Dietary Selenomethionine in Juvenile White Sturgeon (*Acipenser transmontanus*). 40<sup>th</sup> Aquatic Toxicity Workshop in Moncton, NB, October 6 - 9.
- Hecker, M.**, Tompsett-Higley, A., Higley, E.B., Wiseman, S.B. and **Giesy, J.P.** 2013. Transcriptomic effects of Exposure to 17 alpha-ethynylestradiol During Sexual Differentiation on Genetic Male *Xenopus laevis*. SETAC Europe 23<sup>rd</sup> Annual Meeting, Glasgow, Scotland, May 12-16.
- Henkelman, J. and **Johnstone, J.F.** 2013. An active soil warming system powered by alternative (renewable) energy for remote field sites. International Tundra Experiment ITEX, Bergün, Switzerland, September (Oral presentation).
- Hewlett, C., **North, R.L.**, **Johansson, J.**, **Vandergucht, D.**, and **Hudson, J.** 2013. Nutrient inputs to Lake Diefenbaker reservoir through shoreline erosion and slumping. CGU/CWRA/CMOS Conference, Saskatoon, SK, May.
- Hudson, J.**, **Sereda, J.**, **Vandergucht, D.**, **North, R.L.**, **Wheater, H.** and Davies, J. 2013. Introduction to the Lake Diefenbaker Study. CGU/CWRA/CMOS Conference, Saskatoon, SK, May.
- Hudson, J.**, **Sereda, J.**, **Vandergucht, D.**, **North, R.L.**, **Wheater, H.**, and Davies, J. 2013. An introduction to the Lake Diefenbaker Study. American Society of Limnology & Oceanography (ASLO) Aquatic Sciences Conference, New Orleans, LA.
- Hunter, K.**, **Johansson, J.**, **Sereda, J.**, **Vandergucht, D.**, **North, R.L.**, and **Hudson, J.** 2013. Spatial characterization of phosphorus and nitrogen limitation in Lake Diefenbaker: Influence of upstream processes and anthropogenic activities. CGU/CWRA/CMOS Conference 2013, Saskatoon, SK, May.
- Jarošová, B., Filip, J., Hilscherová, K., Tuček, J., Šimek, Z., Bláha, L., Zbořil, R. and **Giesy, J.P.** 2013. Sorption and chemical effects of zero-valent iron nanoparticles in removal of waterborne estrogens. Second European Symposium on Water Technology & Management, Leuven Belgium, November 20-21.
- Johansson, J.**, **Hunter, K.**, **Vandergucht, D.**, **Sereda, J.**, **North, R.L.**, **Head, K.**, **Yip, H.**, and **Hudson, J.** Characterizing phosphorus and nitrogen dynamics under years with differing hydrologic regimes: A case study of a complex prairie reservoir. CGU/CWRA/CMOS Conference 2013, Saskatoon, SK, May.
- Johnstone, J.F.**, Young, N., and **Mamet, S.** 2013. Reproducibility, precision, and time efficiency of three methods for vegetation monitoring in alpine tundra. International Tundra Experiment ITEX, Bergün, Switzerland, September (Oral presentation).
- Jonas, A., Scholz, S., Novakova, K., Fetter, E., Sychrova, E., Kohoutek, J., Ortmann, J., Hilscherova, K. and **Giesy, J.P.** 2013. The Endocrine Disruptive Potential of Phytoplankton Exudates. SETAC Europe 23<sup>rd</sup> Annual Meeting, Glasgow, Scotland, May 12-16.
- Jones, P.**, Tendler, B., Hill, A., Ohiozebau, ., Kelly, E. and **Giesy, J.P.** 2013. Chemodynamic behavior of Thallium in the Slave River, Northwest Territories, Canada. 40<sup>th</sup> Annual Aquatic Toxicity Workshop Annual Meeting, Moncton, NB, October 6-9.
- Lee, S., Hong, S., Noh, K., Liu, X., Khim, J., Yim, U., Shim, W., Choi, K. and **Giesy, J.P.** 2013. Evaluating Toxic Potential of Sediments in Taean Near Hebei Spirit Oil spill site and Contributions of PAHs and Alkylated PAHs. SETAC North America 36<sup>th</sup> Annual Meeting, November 17-23.
- Li, A., Rockne, K.J., Sturchio, N., Wang, Y. and **Giesy, J.P.** 2013. Aquatic Sediment as Indicator and Chronological Recorder of Chemical Pollution – The Great Lakes Experience. 10<sup>th</sup> International Symposium on Persistent Toxic Substances (ISPTS). Edmonton, AB, August 13-17.

- Li, Y.** and Carbone, R.E. 2013: Lower Boundary Forcing related to the Occurrence of Rain in the Tropical Western Pacific. AGU Fall Meeting, San Francisco, CA, December 9 – 13.
- Li, Y.** and Carbone, R.E. 2013: Lower Boundary Forcing related to Occurrence of Rain in the Tropical Western Pacific. Water System Retreat, NCAR, Boulder, CO, December 18.
- Lindenschmidt, K.-E.** and Davies, J.-M. 2013. Winter flow testing of the Upper Qu'Appelle River. 17<sup>th</sup> CRIPE Workshop on the Hydraulics of Ice Covered Rivers, Edmonton, AB, July 21-24, pp. 312-328. [http://cripe.civil.ualberta.ca/Downloads/17th\\_Workshop/Lindenschmidt-Davies-2013.pdf](http://cripe.civil.ualberta.ca/Downloads/17th_Workshop/Lindenschmidt-Davies-2013.pdf)
- Lindenschmidt, K.-E.,** Sydor, M., van der Sanden, J., Blais, E. and Carson, R.W. 2013. Monitoring and modeling ice cover formation on highly flooded and hydraulically altered lake-river systems. 17<sup>th</sup> CRIPE Workshop on the Hydraulics of Ice Covered Rivers, Edmonton, AB, July 21-24, pp. 180-201. [http://cripe.civil.ualberta.ca/Downloads/17th\\_Workshop/Lindenschmidt-et-al-2013.pdf](http://cripe.civil.ualberta.ca/Downloads/17th_Workshop/Lindenschmidt-et-al-2013.pdf)
- Lindsay, M.B.J.** 2014. Biogeochemistry of groundwater contamination, remediation and management in mining environments. Department of Geology – Colloquium Series, University of Kansas, Lawrence, KS, February 20.
- Lucas, B., Tse, T., **Liber, K., Jones, P.D., Wheeler, H.S., Doig, L.E.** and **Giesy, J.P.** 2013. Reconstructing Environmental Trends in Potable Lakes and Reservoirs: The Paleoecotoxicology Toolbox. SETAC Europe 23<sup>rd</sup> Annual Meeting, Glasgow, Scotland, May 12-16.
- Mahmood, T. H., Pomeroy, J. W., Wheeler, H. S.** and **Baulch, H. M.** 2013. Effects of Land Management Practices on Cold Region Hydrological Processes in an Agricultural Prairie Basin. American Geophysical Union, Fall Conference, San Francisco, CA, December.
- Mamet, S.D., Johnstone, J.F.,** Metsaranta, J.M., Hogg, E.H., **Barr, A., van der Kamp, G.,** and Black, A. 2013. Tree ring analysis of forest productivity across moisture gradient in the boreal forest of central Saskatchewan. 16<sup>th</sup> Conference of the International Boreal Forest Research Association, Edmonton, AB, October 2013 (Oral presentation).
- Massé, A.J., Liu, J., Muscatello, J.R. and **Janz, D.M.** 2013. Effects of maternal dietary selenium exposure on early life stages of the amphibian *Xenopus laevis*. Society of Environmental Toxicology and Chemistry, Nashville, TN.
- Massé, A.J., Liu, J., Muscatello, J.R. and **Janz, D.M.** 2013. Effects of maternal dietary selenium exposure on early life stages of the amphibian *Xenopus laevis*. Aquatic Toxicity Workshop, Moncton, NB.
- McPhee, D.L. and **Janz, D.M.** 2013. Dietary selenomethionine exposure alters swim performance and metabolic capacity in juvenile fathead minnow and rainbow trout. Aquatic Toxicity Workshop, Moncton, NB.
- McPhee, D.L. and **Janz, D.M.** 2013. Effects of dietary selenium exposure on swimming performance and energy homeostasis in two juvenile fish species. Society of Environmental Toxicology and Chemistry, Nashville, TN.
- Mohammadzadeh, O. and **Giesy, J.P.** 2013. More Insights into Chemical Treatment of Fluid Fine Tailings (FFT) with IPC Technology. 63<sup>rd</sup> Canadian Chemical Engineering Conference' Symposium: Oil and Gas, Session on Heavy Oil Recovery and Upgrading. Fredericton, New Brunswick, October 20-23.
- Nachshon, U., Ireson, A.M., van der Kamp, G., Wheeler, H.S.,** and Davies, S., 2013. Salt Dynamics in prairie wetlands under changing climate. IAH Geomontreal meeting, October.
- Nazemi, A.** and **Elshorbagy, A.A.** 2013. A Stochastic Rainfall Disaggregation Framework for Simulating the Sub-daily Extreme Rainfall Values in the City of Saskatoon, Joint Congress of the CMOS, CGU, and CWRA, Saskatoon, SK, May 26 - 30, Paper No. Abstract 6353.

- Nazemi, A., Wheeler, H. and Elshorbagy, A.A.** 2013. Toward Emulating Complex Water Resource Systems: Linking Inflow Characteristics and System Response at the Annual Time Scale, Joint Congress of the CMOS, CGU, and CWRA, Saskatoon, SK, May 26 - 30, Paper No. Abstract 6648.
- North, R., Johansson, J., Hunter, K., Vandergucht, D., Guildford, S., Abirhire, O., Doig, L., Liber, K., Sadeghian, A., Lindenschmidt, K.-E. and Hudson, J.** 2013. Evidence for internal phosphorus loading and its relationship to cyanobacterial biovolume and physiology in a large reservoir (Lake Diefenbaker, SK). Annual Meeting of the North American Lake Management Society. San Diego, CA, October 30 to November 1.
- North, R., Johansson, J., Hunter, K., Vandergucht, D., Guildford, S., Abirhire, O., Doig, L., Liber, K., Sadeghian, A., Lindenschmidt, K.-E. and Hudson, J.** 2013. Evidence for internal phosphorus loading and its relationship to cyanobacterial biovolume and physiology in a large reservoir (Lake Diefenbaker, SK). North American Lake Management Society, 33<sup>rd</sup> International Symposium, San Diego, CA, October 30 - November 1.
- North, R.L., Khan, N.H., Ahsan, M., Prestie, C., Korber, D.R., Lawrence, J.R. and Hudson, J.** 2013. Environmental factors controlling bacterial indicators in Lake Diefenbaker. CGU/CWRA/CMOS Conference, Saskatoon, SK.
- North, R.L., Khan, N.H., Ahsan, M., Prestie, C., Korber, D.R., Lawrence, J.R., and Hudson, J.** 2013. Bacterial abundances and water quality objectives in a large prairie reservoir: Lake Diefenbaker (SK, Canada). American Society of Limnology & Oceanography (ASLO) Aquatic Sciences Conference, New Orleans, LA.
- North, R.L., Winter, J.G. and Dillon, P.J.** 2013. Nutrient indicators of agricultural impacts in the tributaries of a large lake. CGU/CWRA/CMOS Conference, Saskatoon, SK.
- Pickering, I.J., Ponomarenko, O., George, G.N., Gailer, J., Leslie, E.M., La Porte, P.F., Strait, K. and Spallholz, J.** 2013. Synchrotron studies of selenium interactions with arsenic. Selenium in the Environment and Human Health - Proceedings of the 3<sup>rd</sup> International Conference on Selenium in the Environment and Human Health, 206-207, Hefei, Anhui, China, November 10-14.
- Quay, R., Sampson, D., White, D., Kirkwood, C. and **Gober, P.** 2013. Using advanced scenario analysis as an anticipatory tool: Exploring the uncertainty of urban water demand and supply within Central Arizona. 15<sup>th</sup> Annual CAP LTER Poster Symposium and All Scientist Meeting 2013, SkySong, Scottsdale, AZ, January 11 (Poster presentation).
- Reed, M.G.** 2013. Can indigenous perspectives and knowledge be included in UNESCO biosphere reserves in Canada? Canadian Association of Geographers. Biocultural Conservation Session. St. John's, NL, August 13.
- Reed, M.G.** 2013. What is sustainability anyway? The university and sustainability. Land, Place and Environment: Advancing Learning and Practice Toward a Sustainable Future, Saskatoon: Sustainability Education Research Institute, University of Saskatchewan. October 4.
- Sampson, D.A., Quay, R, White, DD., **Gober, P.** and Kirkwoodm C. 2013. Anticipatory water management in Phoenix using advanced scenario planning and analyses: WaterSim 5. American Geophysical Union Fall Meeting, December 9-13, San Francisco, CA, December 11 (Poster presentation).
- Saunders, D.M., Wiseman, S., Mankidy, R. and **Giesy, J.P.** 2013. Three Novel Brominated Flame Retardants: Potential Effects on Fecundity, Reproductive Fitness, and Maternal Transfers in Japanese Medaka. SETAC North America 36<sup>th</sup> Annual Meeting, November 17-23.



- Schiffer, S.R., Doig, L.E., and Liber, K.** 2013. Acute and chronic toxicity of aqueous vanadium to model and field collected freshwater invertebrates. 40<sup>th</sup> annual Aquatic Toxicity Workshop, Moncton, NB, October 6-9. (1st place, student poster competition).
- Solomon, K.R., Mackay, D., Giddings, J.M., Williams, W.M., Moore, D.R., Purdy, J., Cutler, C. and **Giesy, J.P.** 2013. Ecological risk assessment for chlorpyrifos in terrestrial and aquatic systems in North America – overview and conclusions. Ecotoxicological Risk Assessment for Agricultural Use of Chlorpyrifos in the US. 246<sup>th</sup> ACS National Meeting & Exposition, Indianapolis, Indiana, September 8-12.
- Sychrova, E., Novakova, K., Adamovsky, O., Prochazkova, T., Hilscherova, K. and **Giesy, J.P.** 2013. Bioactive Compounds from Cyanobacteria as Potential Endocrine Disruptors in Aquatic Environments. SETAC Europe 23<sup>rd</sup> Annual Meeting, Glasgow, Scotland, May 12-16.
- Tallon, L.K., O'Kane, M., **Si, B.C.** and **Barbour, S.L.** 2013. Distributed Temperature Observations Reveal the Scale of Spatial Variability in Unsaturated Soil Covers. Proceedings of the 17<sup>th</sup> International Conference on Tailings and Mine Waste, Banff, AB, November 3-6, 10pp.
- Tse, T.J., Quinones-Rivera, Z., Leavitt, P.R., **Doig, L.E., Lucas, B., Liber, K., Wheeler, H., Jones, P.D.** and **Giesy, J.P.** 2013. Reconstructing the Historical Nutrient Status of Lake Diefenbaker, Saskatchewan, Canada, Using Sediment Algal Pigment Composition. SETAC North America 36<sup>th</sup> Annual Meeting, November 17-23.
- Tse T.J.,** Quiñones-Rivera, Z., Leavitt, P.R., **Doig, L.E., Lucas, B., Liber, K., Giesy, J.P., Wheeler, H.S.** and **Jones, P.D.** 2013. Reconstructing the nutrient status of Lake Diefenbaker, Saskatchewan, Canada, using sediment algal pigment composition. Society of Environmental Toxicology and Chemistry 34<sup>th</sup> Annual Meeting, Nashville, TN, November 17-21.
- Vandergucht, D., Johansson, J., Hunter, K., Yip, H., Head, K., Prestie, C., Abirhire, O., North, R.L., Sereda, J.** and **Hudson, J.** 2013. Physical and chemical characterization of Lake Diefenbaker during the 2011 and 2012 ice free seasons. CGU/CWRA/CMOS Conference 2013, Saskatoon, SK, May.
- Walker, X.J. and **Johnstone, J.F.** 2013. Regional variability of black spruce climate growth responses in interior Alaska. 16<sup>th</sup> Conference of the International Boreal Forest Research Association, Edmonton, AB, October (Oral presentation).
- Wiseman, S.B., Mankidy, R., He, Y., Alharbi, H., dos Santos Pereira, A., Martin, J.W. and **Giesy, J.P.** 2013. Identification of Toxic Constituents of the Dissolved Organic Fraction of Oil Sands Process Affected Water Using Bioassay Directed Fractionation.” SETAC Europe 23<sup>rd</sup> Annual Meeting, Glasgow, Scotland, May 12-16.

### Books and Book Chapters - 2014

- Basu, N. and **D.M. Janz.** 2014. Organometal(loid)s. Pp. 141-194 In: K.B. Tierney, A.P. Farrell and C.J. Brauner (Eds.) Fish Physiology Vol 33, Organic Chemical Toxicology of Fishes. Elsevier, San Diego.
- Clark, D.A.,** Workman, L. and Slocomb, D.S. 2014. Science-based grizzly bear conservation in a co-management environment: The Kluane region case, Yukon. In: *Large Carnivore Conservation: Integrating Science and Policy in the North American West*. Eds. S.G. Clark and M.B. Rutherford, University of Chicago Press, Chicago, IL, pp. 108-139.
- Clark, S.G., Cherney, D.N., and **Clark, D.A.** 2014. Large carnivore conservation: A perspective on constitutive decision-making and options. In: *Large Carnivore Conservation: Integrating Science and Policy in the North American West*. Eds. S.G. Clark and M.B. Rutherford, University of Chicago Press, Chicago, IL pp. 251-288.

- Diduck, A., **Reed, M.G.** and George, C. 2014. Participatory approaches to resource and environmental management. In: *Resource and Environmental Management in Canada. 5th Edition*. Ed. B. Mitchell, Don Mills, Oxford University Press, In Press.
- Gupta, H.V.**, Blöschl, G., **McDonnell, J.J.**, Savenije, H.H.G., Sivapalan, M., Viglione, A. and Wagener, T. 2014. Synthesis of the Benchmark Report. In: *The PUB Benchmarking Report*. G. Blöschl et al. (eds), Cambridge University Press, in press.
- Janz, D.M.** 2014. Chlorobenzilate. In: *Encyclopedia of Toxicology, 3rd ed.*, Ed. P. Wexler, Elsevier, San Diego, CA, pp. 874-875.
- Janz, D.M.** 2014. Dinitrophenols. In: *Encyclopedia of Toxicology, 3rd ed.*, Ed. P. Wexler, Elsevier, San Diego, CA, pp. 177-178.
- Janz, D.M.** 2014. Dithiocarbamates. In: *Encyclopedia of Toxicology, 3rd ed.*, Ed. P. Wexler, Elsevier, San Diego, CA, pp. 212-214.
- Janz, D.M.** 2014. Hexachlorobutadiene. In: *Encyclopedia of Toxicology, 3rd ed.*, Ed. P. Wexler, Elsevier, San Diego, CA, pp. 872-873.
- Gober, P.**, White, D.D., Quay, R., Sampson, D.A. and Kirkwood, C.W. 2014. Socio-hydrology modelling for an uncertain future, with examples from the USA and Canada. In: *Integrated Environmental Modelling to Solve Real World Problems: Methods, Vision and Challenges*. Eds. A.T. Riddick, H. Kessler and J.R.A. Giles, Geological Society, Special Publications, London, 408, doi.org/10.1144/SP408.2.
- Gober, P.** 2014. Decision making under uncertainty: A new paradigm for water resources planning and management. In: *Handbook of Water Engineering*. Eds. Lawrence K. Wang and Chi Ted Yang, Humana Press Inc. and Springer Science, New York, Vol. 15: 422-436.

### Books and Book Chapters - 2013

- Clark, D.** 2013. Polar bear sport hunting in Canada: cross-scale effects on recreational hunting regimes (Box 18.6). In: *Arctic Biodiversity Assessment: Status and trends in Arctic biodiversity. Conservation of Arctic Flora and Fauna*. Ed. H. Meltofte, Akureyri, IS, pp. 504.
- Clark, D.A.** and Workman, L. 2013. Chapter 8: Transformation in subsistence systems in the southwest Yukon Territory, Canada. In: *Arctic Council. 2013. Arctic Resilience Interim Report*. Stockholm Environment Institute and Stockholm Resilience Centre, Stockholm, SU, pp. 103-106.
- Davis, E.J. and **Reed, M.G.** 2013. Governing for transformation and resilience: The role of identity in renegotiating roles for forest-based communities of British Columbia's Interior. In: *The social transformation of rural Canada: New insights into community, culture, and citizenship*. Eds. J. Parkins and M.G. Reed, UBC Press, Vancouver, BC, pp. 249-268.
- Horváth, I.T. and **Giesy, J.P.** 2013. Green Chemistry and Ecotoxicology. In: *Encyclopedia of Aquatic Ecotoxicology, Volume 1*. Eds. J.F. Féraud and C. Blaise, Springer, Dordrecht, The Netherlands, pp. 569-573.
- Izadifar, Z. and **Elshorbagy, A.A.** 2013. Chapter 9: Data Driven Techniques and Wavelet Analysis for the Modeling and Analysis of Actual Evapotranspiration. In: *Evapotranspiration - An Overview*. Ed. S. G. Alexandris, InTech, New York, pp. 167-206.
- Janz, D.M.** 2013. Biomarkers in fish ecotoxicology. In: *Encyclopedia of Aquatic Ecotoxicology*. Eds. J.-F. Féraud and C. Blaise, Springer, Berlin, Germany, pp. 211-220.
- Jones, P.D., Hecker, M., Wiseman, S. and Giesy, J.P.** 2013. Birds. Chap 10. In: *Endocrine Disruptors: Hazard Testing and Assessment Methods*. Ed. P. Matthiesson, J. Wiley and Sons, Hoboken, New Jersey.

- Kofinas, G., **Clark, D.** and Hovelsrud-Broda, G. 2013. Chapter 5: Adaptive and transformative capacity. In: *Arctic Council. 2013. Arctic Resilience Interim Report.* Stockholm Environment Institute and Stockholm Resilience Centre, Stockholm, SU, pp. 71-91.
- Massie, M. and **Reed, M.G.** 2013. Cumberland House in the Saskatchewan River Delta: Flood memory and the municipal response, 2005 and 2011. In: *Climate Change And Flood Risk Management: Adaptation and Extreme Events at the Local Level.* Ed. C. Keskitalo, Edward Elgar Publishers, Cheltenham, UK. pp. 150-189.
- Kuby, M., Harner, J. and **Gober, P.** 2013. *Human Geography in Action (Sixth Edition).* New York: Wiley, 560 pp.
- Parkins, J. and **Reed, M.G.** (eds.) 2013. *The Social Transformation of Rural Canada: New Insights into Community, Culture, and Citizenship.* UBC Press, Vancouver, BC, 21 chapters, 3 interleafs, 414 pp.
- Parkins, J. and **Reed, M.G.** 2013. Introduction: Towards a transformative understanding of rural social change. In: *The social transformation of rural Canada: New insights into community, culture, and citizenship.* Eds. J. Parkins and M.G. Reed. UBC Press, Vancouver, BC, pp. 1-18.
- Parkins, J. and **Reed, M.G.** 2013. Postscript: The future of rural studies in Canada. In: *The social transformation of rural Canada: New insights into community, culture, and citizenship.* Eds. J. Parkins and M.G. Reed. UBC Press, Vancouver, BC, pp. 387-389.
- Patrick, R.** 2013. Indigenous Planning and Source Water Protection. In: *Models of Indigenous Development.* Eds. I. Skelton and O. Ixtacuy Lopez.
- Pomeroy, J.W.** 2013. Preface. In: *Putting Prediction in Ungauged Basins into Practice.* Eds. J.W. Pomeroy, P.H. Whitfield, C. Spence. Canadian Water Resources Association and International Association of Hydrological Sciences, Cambridge, Ontario. pp. iii-v.
- Pomeroy, J.W., Spence, C.** and Whitfield, P.H. 2013. Putting prediction in ungauged basins into practice. In: *Putting Prediction in Ungauged Basins into Practice.* Eds. J.W. Pomeroy, P.H. Whitfield, C. Spence. Canadian Water Resources Association and International Association of Hydrological Sciences, Cambridge, Ontario. pp. 1-11.
- Pomeroy, J.W., Shook, K.R.,** Fang, X. and Brown, T. 2013. Predicting spatial patterns of inter-annual runoff variability in the Canadian Prairies. In: *Runoff Prediction in Ungauged Basins. Synthesis across Processes, Places and Scales.* Eds. G. Blöschl, M. Sivapalan, T. Wagener, A. Viglione and H. Savenije) Cambridge University Press, Cambridge, UK. pp. 283-289.
- Pomeroy, J.W.,** Whitfield, P.H. and **Spence, C.** 2013. *Putting Prediction in Ungauged Basins into Practice.* Canadian Water Resources Association and International Association of Hydrological Sciences, Cambridge University Press, Cambridge, UK, 310 p.
- Pomeroy, J.W.,** Fang, X., **Shook, K.** and Whitfield, P.H. 2013. Predicting in ungauged basins using physical principles obtained using the deductive, inductive and abductive reasoning approach. In: *Putting Prediction in Ungauged Basins into Practice.* Eds. J. W. Pomeroy, P.H. Whitfield, C. Spence. Canadian Water Resources Association and International Association of Hydrological Sciences, Cambridge, Ontario. 43-63.
- Council of Canadian Academies. 2013. Water and Agriculture in Canada: Towards Sustainable Management of Water Resources. The Expert Panel on Sustainable Management of Water in the Agricultural Landscapes of Canada, Council of Canadian Academies, Ottawa. 259 p. (**H. Wheeler** chaired the expert panel and was lead author of substantial sections of the report).

Zhang, X., **Giesy, J.P.** and **Hecker, M.** 2013. Cell Lines in Aquatic Toxicology. In: Encyclopedia of Aquatic Ecotoxicology, Volume 1. Eds. J.F. Féraud and C. Blaise. Springer, Dordrecht, The Netherlands, pp. 259-267.

#### Plenary, Key Note and Invited Lectures - 2014

- Barbour, L.** 2014. Two invited talks Brisbane and Sydney, Australia workshop. March 15-30, jointly sponsored by Geo-Slope and University of New South Wales. Invited workshop presenter.
- Barbour, L.** 2014. Research Methods, Guest Lecture for: CE 990 - 2013/14 Graduate Student Seminar Series, UofS, Saskatoon, SK, Feb. 27, Invited Presenter.
- Barbour, L.** Invited Presenter - NCGRT-ACSMP workshop: Aquitards, aquifers and mining, National Centre for Groundwater Research and Training, Australian Centre for Sustainable Mining Practices, University of New South Wales (UNSW), Australia, March 27: Geological weighing lysimeters - applications to mine hydrology, and March 28: Evaluation of soil-atmosphere-vegetation interactions for mine closure applications.
- Barbour, L., O’Kane, M., McKenna, G. and Straker, J.** 2014. Cover System and landform design in cold regions, Cold Covers Practice 2014 (Seminar), Whistler, B.C. April 7 - 9, Invited Workshop Presenter.
- Bharadwaj, L.** 2014. From the Lab to the Reserve: The Transformative Power of Engaged Scholarship. Engaged Scholar Day, University of Saskatchewan, Saskatoon, SK, May 14, Keynote Plenary.
- Bharadwaj, L.** 2014. Shale Gas Development in Canada: The Potential Health Risks Environmental Health Forum for Community Leaders. St John Room, Crowne Plaza, Fredericton, April 24.
- Bharadwaj, L.** 2014. Shale Gas Development in Canada: The Potential Health Risks. Environmental Health Public Lecture Hazen Hall, University of New Brunswick, Saint John, NB, April 24.
- Bharadwaj, L.** 2014. Shale Gas Development in Canada: What are the Potential Health Risks? Yukon Legislative Assembly Select Committee Regarding the Risks and Benefits of Hydraulic Fracturing, 33<sup>rd</sup> Yukon Legislative Assembly Public Proceedings, 2071 Second Avenue, Whitehorse, YK, May 27-28, Invited speaker.
- Bharadwaj, L.** 2014. Understanding and Managing Health Risks of Shale Gas Development. New Brunswick Energy Institute Environmental Health Sessions. Ask the Experts. Government Session, Irving Auditorium, Hugh John Fleming Forestry Complex (HJFFC) – 1350 Regent St, Fredericton, NB, April 23.
- Bharadwaj, L.** 2014. What is Healthy Water? Water and Innovation: an Interdisciplinary Exploration Workshop at UBC. Program on Water Governance, University of British Columbia, 439-2202 Main Mall, Vancouver, BC, January 30, Public Plenary.
- Doig, L. and Jones, P.D.** 2014. The Slave Watershed Environmental Effects Program. GIWS Workshop – Annual Progress and Plans. Park Town Hotel, Saskatoon, SK, February 25 - 26.
- Ferguson, G.** 2014. Deep Injection in the Western Canada Sedimentary Basin. National Groundwater Association Conference on Characterization of Deep Groundwater. Denver, CO, May 8.
- Ferguson, G.** 2014. Injection Wells and Energy Resources. ETH Zurich. Zurich, Switzerland. May 14.
- Giesy, J.P.** Wiseman, S.B., dos Santos Pereira, A., Remend, N., He, Y. and Mankidy, R. 2014. Acute toxicity of neutral-, acid-, and base- extractable fractions of oil sands process-affected water to fathead minnow (*Pimephales promelas*) embryos. 97<sup>th</sup> Canadian Chemistry Conference, Vancouver, BC, Canada, June 1-5, Invited.
- Hecker, M.** 2014. Characterization of complex environmental exposure scenarios by effects directed analysis. The First Xiamen Symposium on Marine Environmental Sciences; Xiamen, China, January 9 – 11, Plenary Keynote.

- Hudson, J.** 2014. A Glimpse at Three Years of Dynamic Behavior on Lake Diefenbaker. Global Institute of Water Security Annual Workshop. Park Town Hotel, Saskatoon, SK, Feb 25-26.
- Hunter, K., Vandergucht, D., Abirhire, O., Dubourg, P., Hewlett, C., Johansson, J., North, R., Prestie, C., Sereda, J., Yip, H., DeBoer, D. and Hudson, J.** 2014. Characterizing the Limnology of Lake Diefenbaker. World Water Day Event. Global Institute of Water Security and The Canadian Water Resources Association. Saskatoon, SK, March 21.
- Ireson, A.M.** 2014. Quantifying groundwater recharge in diverse, complex settings. University of Queensland, Brisbane, Australia, March 17.
- Johnstone, J.F.** 2014. Disturbance as a catalyst and driver of forest change. Université Laval, Quebec City, QC, January, Invited seminar.
- Jones, P.D.** 2014. Reconstructing the nutrient status of Lake Diefenbaker, Saskatchewan, Canada, using sediment algal pigment composition. Tim Tse et al. Poster Presentation – Water Leaders of Tomorrow Lecture Series, Saskatoon, Saskatchewan, March 21.
- Jones, P.D.** 2014. SWEEP: The Slave Watershed Environmental Effects Program. JOSMP Fish Monitoring – Technical Workshop. Calgary, AB, April 29 - 30.
- Jones, P.D., Markus H., Cessna, A., Putz, G., Codling, G., Tumber, V., Yuan, H., Beitel, S., Higley, E. and Giesy, J.** 2014. Toxicity profiles of water samples from Swift Current Creek and Saskatoon Storm-Water runoff as determined by Analytical and Effect Directed Analysis, GIWS Workshop – Annual Progress and Plans. Park Town Hotel, Saskatoon, SK, February 25 - 26.
- Kienzle, S, **Wheaton, E.,** Bonsal, B., **Wittrock, V.** and Barrow, E. 2014. The VACEA Project: Modelling Climate Impacts on Agro-Ecosystems. IRIACC (International Research Initiative on Adaptation to Climate Change) Panel, Congress of the Humanities and Social Sciences, Canadian Association of Geographers Congress, Brock University, St. Catharines, ON, May 24-30, Invited Presenter.
- McDonnell, J.J.** 2014 Japan Geophysical Union, Session on Insight into Change and Evolution in Hydrology, Yokohama, Japan, April 29-30.
- McDonnell, J.J.** 2014. 2014 Third International Tropical Hydrology Workshop, Malaysian Borneo, February 10-14.
- McDonnell, J.J.** 2014. Kyoto University, Department of Civil Engineering, Kyoto Japan, June 1.
- McDonnell, J.J.** 2014. NW Food and Agriculture University, Xian, China, June 16.
- McDonnell, J.J.** 2014. Tohoku University, Department of Civil Engineering, Sendai, Japan, May 28.
- McDonnell, J.J.** 2014. UC Irvine, Department of Civil and Environmental Engineering, Irvine, CA, January 10.
- North, R.L.** 2014. Timing matters: Nutrient loading from land to lake. Brandon University, Brandon, MB.
- Patrick, R.** 2014. Capacity building for source water protection: Yellowknife, NWT. Government of the Northwest Territories. February 20.
- Patrick, R.** 2014. Saskatchewan Association of Watersheds Annual Conference. Taking a Soft Path to Water Management. Saskatoon, SK, March 19-21.
- Patrick, R.** 2014. Source water protection planning in your community. Ontario First Nations Technical Services Corporation – Water Symposium. Niagara Falls, ON. March 3-5.
- Patrick, R.** 2014. Transportation Planning and Design. Presentation Title: Urban Transportation and Design: Getting to Where we Need to Go”. Saskatoon Sustainability Networking Conference. Saskatoon, SK. January 24.
- Pickering, I.J.,** 2014. Synchrotron studies of arsenic, selenium and the world’s worst mass poisoning. Environmental Health Sciences Research Bureau Seminar, Health Canada, Ottawa, ON, June 16.
- Reed, M.G.** 2014. Learning with Canadian Biosphere Reserves: Connecting researchers and practitioners through a national community of practice. Knowledge Translation: Bridging Gaps Between Science and Society. First International Symposium of the ILEK (Integrated Local Ecological Knowledge) Programme. Research Institute for Humanity and Nature, Kyoto, Japan. September 13-14.

- Reed, M.G.** and Godmaire, H. 2014. Promoting Transformational Change by Strengthening a National Community of Practice: Working with Canadian Biosphere Reserves. AGM of the Canadian Biosphere Reserves Association and the Canadian Commission for UNESCO. Victoria, BC, June 5, Invited Presenter.
- Roste, J., Mahmood, T., Galuschik, N., Gooding, R., Pomeroy, J., Wheeler, H.S.** and **Baulch, H.M.** 2014. Research Update: Hydrology and nutrient dynamics in Tobacco Creek. South Tobacco Creek Research consortium, University of Manitoba, Winnipeg, MB, May 26, Invited seminar.
- Welter, S., **Reed, M.G.** and Gamble, A. 2014. Stretching community-based ecosystem management to protect Indigenous livelihoods: The Beardy's and Okemasis First Nation and the Prince Albert Model Forest. Ecosystem services under Pressure. Invited for the XXIV IUFRO (International Union of Forest Research Organizations) World Congress 2014. Sustaining Forests, Sustaining People: The Role of Research. Salt Lake City, UT, October 5-11, Invited sub-plenary session.
- Wheater, H.S.** 2014. An introduction to GIWS water quality research. Prairie Provinces Water Board, Committee on Water Quality, National Hydrology Research Centre, Saskatoon, SK, March 3.
- Wheater, H.S.** and **P.A. Gober.** 2014. Meeting the Science Challenges of Water Security in the Saskatchewan River Basin: a Regional Hydroclimate Project from Western Canada. Dooge Nash Symposium. Dublin, Ireland, April 24, Invited Speaker.
- Wheater, H.S.** Mackenzie River Basin Board – Saskatoon, Saskatchewan (2013);
- Wheater, H.S.** UNESCO Kovacs Colloquium – Paris, France (2013)
- Wheaton, E.** 2014 Agriculture and Patterns of Climate Extremes on the Canadian Prairies. 26<sup>th</sup> Conference of the Saskatchewan Soil Conservation Association, Saskatoon, SK, January 16, Invited Presenter.
- Wheaton, E.** 2014. Comments on the Guidebook: Pathways to Climate Change Resilience. International Forum Linking Gender, Adaptation, Climate Change and Forestry/ Resource Management in Canada, Saskatoon, SK, May, Invited Presenter.
- Wheaton, E.** and **V. Wittrock.** 2014. Dust Storms of the Canadian Prairies: A Dustier and Muddier Outlook. Invited Presentation to the Great Plains Drought Symposium, Lincoln, Nebraska, April 1-4.
- Wittrock, V,** Pittman, J. and **Wheaton, E.** 2014. Saskatchewan's Industry Adapting to our Changing Climate. Ministry of Environment, Regina, Saskatchewan, March, Invited Presenter.
- Zwiers, F. and **Wheaton, E.** 2014. Changing Climates (IPCC AR5) and Implications for the Canadian Prairies. School of Environment and Sustainability, University of Saskatchewan, Saskatoon, SK, February 14, Invited Presentation.

### Plenary, Key Note and Invited Lectures - 2013

- Barbour, L.** 2013. Can we Successfully Reclaim Oil Sands Mine Closure Landforms? - A review of Overburden Reclamation Research in the Oil Sands Industry. Saskatoon Geotechnical Group University of Saskatchewan, Saskatoon, SK, September 18, Invited Presenter.
- Barbour, L.** 2013. Hydrogeological Characterization of Oil Sands Mine Closure Landforms - Review of NSERC/SCL IRC. Barbour IRC Review Mtg (SCL & GIWS in attendance), University of Saskatchewan, Saskatoon, SK, May 7, Invited Presenter.
- Barbour, L.** 2013. Oil Sands Research. Meeting between reps from Global Institute for Water Security (GIWS) and Syncrude Canada Ltd. (SCL), National Hydrology Research Centre, Saskatoon, SK, May 7, Invited Presenter.
- Barbour, L.** 2013. Reconstruction of landforms for reclamation of oil sands mines. SK Department of Highways and Transportation. Saskatoon office, 4<sup>th</sup> Floor Boardroom), October 9, Invited Presenter.

- Barbour, L.** IRC (Barbour) Research: Syncrude Canada Ltd seminar/meetings/discussions: for Barbour and his students/research staff to give presentations/updates on their IRC work/projects, Edmonton, AB, Nov.26, Invited Presenter.
- Bharadwaj, L.** 2013. Traditional Knowledge Indicators for the SWEEP Program. Slave River Environment Effects Monitoring Program (SWEEP) Indicator Workshop. Slave River and Delta Partnership – University of Saskatchewan. Roaring Rapids Hall, Fort Smith, NT, July 11-12, Oral presentation.
- Bharadwaj, L.,** 2013. A Rush for Metals: Voices from Ancash Peru. Global Health Conference, Saskatoon, SK, September 20 – 23, oral presentation.
- Chilima, J. and Bharadwaj, L.** 2013. Applying community-based participatory research approach in a multi-phases water resources management study: Lake Diefenbaker, Saskatchewan, Canada. A poster presented at Sharing Water Resources in a Growing Economy: Science to Policy, Prairie Northern Chapter of SETAC (SETAC PNC) 4<sup>th</sup> Annual Meeting, University of Lethbridge, Lethbridge, AB, June 7- 9, Oral presentation.
- Ferguson, G.** 2013. Competition for Pore Space in the Western Canada Sedimentary Basin. Queen`s-Royal Military College Centre for GeoEngineering. Kingston, ON. November 20.
- Ferguson, G.** Geothermal Opportunities in Saskatchewan. Canadian Society for Civil Engineering. Saskatoon Chapter, Saskatoon, SK, February 20.
- Giesy, J.P.** 2013. Ecotoxicological Evaluation of Perfluorooctanesulfonate (PFOS) in the Environment. International Conference on Environmental Safety and Ecological Criteria. Nanjing, PR China, June 30 - July 2, Invited, Plenary, Keynote.
- Giesy, J.P.** 2013. Predicting the Toxic Potency of Any Dioxin-like Compound to Any Avian Species. US Geological Survey, Midcontinent Research Laboratory, Columbia, MO, August 12, Invited.
- Giesy, J.P.,** Lu, Y.L., Wang, L., Luo, T., Park, J. and Khim, J.S. 2013. Status and Trends of Contaminants in Bohai Bay and the Yellow Sea: An International Perspective. Toxicology, Centre, University of Saskatchewan, Saskatoon, SK, September, 23.
- Gleeson, T., **Ferguson, G.,** Manning, A.H., Wada, Y., Bierkens, M.F.P. and van Beek, L.P.H. 2013. Beyond cross-sections: regional groundwater systems in the real, three-dimensional world including humans. International Symposium on Regional Groundwater Flow: Theory, Applications and Future Development, Xi'an, China, June 2013. Invited keynote speaker.
- Gober, P.** 2013. Scenario development and futures planning for the Saskatchewan River Basin. Below Your Watershed: Your Connection to the River and Groundwater, October 21-23, Medicine Hat, AB.
- Guertin, M.A. and **Reed, M.G.** 2013. Implementing the periodic review in Canada La mise en oeuvre des examens periodiques au Canada. Strengthening the Biosphere Reserve Network Management Framework. EuroMAB. Brockville, ON, October 15-19.
- Hudson, J.** 2013. Potential Water Quality Issues in Lake Diefenbaker. Ken Cheveldayoff, Minister of the Environment, Saskatchewan. National Hydrology Research Centre, Saskatoon, SK. July 9
- Hudson, J.** 2013. Progress on Lake Diefenbaker. Saskatchewan Watershed Authority. Moose Jaw, SK. November 14.
- Hudson, J.** 2013. Water Quality Monitoring: Lake Diefenbaker as an Example. Annual meeting of the Provincial Association of Resort Communities of Saskatchewan (PARCS). Watrous, SK. October 5.
- Ireson, A.M.** 2013. Groundwater and salinization of prairie wetlands. Below your watershed conference, Medicine Hat, AB, organized by Partners FOR the Saskatchewan River Basin, October, Invited Talk.
- Johnstone, J.F.** 2013. Disturbance, resilience, and inertia of boreal forests under climate change. 16<sup>th</sup> Conference of the International Boreal Forest Research Association, Edmonton, AB, October, Invited keynote speaker.
- Jones, P.D.** 2013. Slave Watershed Environmental Effects Program (SWEEP). 2<sup>nd</sup> Northwest Territories Environmental Monitoring Annual Results Workshop. Yellowknife, NWT, December 10 - 12.

- Jones, P.D.** 2013. SWEEP: The Slave Watershed Environmental Effects Program. The 40<sup>th</sup> Annual Aquatic Toxicity Workshop, Moncton, NB, October 6-9.
- Jones, P.D.**, Tendler, B., Hill, A., Ohiozebau, E., **Giesy, J.**, Kelly, E., J. Fresque-Baxter. 2013. Chemodynamic behavior of Thallium in the Slave River, Northwest Territories The 40<sup>th</sup> Annual Aquatic Toxicity Workshop, Moncton, NB, October 6-9.
- Lindenschmidt, K.-E.** 2013. Development of a surface water quality modelling system for the South Saskatchewan River Basin. Sensors 4 Water - International conference on global challenges and opportunities, Assen, The Netherlands, September 9-10.
- Lindenschmidt, K.-E.** 2013. Water security issues in the Saskatchewan River Basin. Manitoba Conservations Districts Association 38<sup>th</sup> Annual Conference, Brandon, MB, December 3.
- McDonnell, J.J.** 2013. AGU Chapman Conference on Soil Mediated Drivers of Coupled Hydrological and Biogeochemical Processes, Tucson, AZ, October 21-24.
- McDonnell, J.J.** 2013. Boundary conditions and re-thinking watershed hydrology from the bottom-up. Tsinghua University, Department of Hydraulics and Civil Engineering, Beijing, China, July 1.
- McDonnell, J.J.** 2013. Grand challenges in coupled soil, water and landscape processes. Hydropedology and Sustainable Natural Resource Management, Beijing Normal University, July 29.
- McDonnell, J.J.**, 2013. Research frontiers in isotope hydrology. National Hydrology Research Center, Environment Canada, Saskatoon, SK, December 5
- North, R.L.** 2013. From zero to sixty: The hot and cold of algae, stench, and death. Presented at the Great Lakes Institute of Environmental Research-University of Windsor, Lum Clark Seminar Series.
- North, R.L.** 2013. The hot and cold of algae, stench, and death; my work in limnology. Presented at the University of Regina, Regina, SK, Biology Seminar Series.
- North, R.P.**, **North, R.L.**, Livingstone, D.M., Köster, O. and Kipfer, R. 2013. Long-term changes in hypoxia in a large temperate lake: consequences of a climate regime shift. Presented in a workshop on internal phosphorus loading, NALMS Conference, San Diego, CA.
- Patrick, R.** 2013. How to develop a source water protection plan in a community near you!" Partners for the Saskatchewan River Basin. Annual Conference. Medicine Hat, AB, October 23.
- Pickering, I. J.** 2013. Applications of X-ray Absorption Spectroscopy in Life Sciences. 16<sup>th</sup> National School on Neutron and X-ray Scattering. Argonne National Laboratory, Argonne, IL, June 18.
- Pickering, I. J.** 2013. Applications of X-ray Absorption Spectroscopy in Environmental, Health and Chemical Sciences. 15<sup>th</sup> National School on Neutron and X-ray Scattering, Argonne National Laboratory, Argonne, IL, USA, August 10 - 24.
- Pickering, I. J.**, Ponomarenko, O., George, G.N., Gailer, J., Leslie, E.M., La Porte, P.F., Strait, K. and Spallholz, J. 2013. Interactions of arsenic and selenium in vivo probed by synchrotron X-ray absorption spectroscopy and imaging. Seminar, Department of Chemistry, University of Calgary, Calgary, AB, October 4.
- Reed, M.G.**, Godmaire, H., and 16 biosphere reserves. 2013. Canadian Commission for UNESCO 1 + 1 = 3: The Benefits of Partnership & Social Learning. EuroMAB Brockville, ON, Oct 15-19, Invited Keynote Presentation and Workshop.
- Tim Tse** et al. 2013. Reconstructing the nutrient status of Lake Diefenbaker, Saskatchewan, Canada, using sediment algal pigment composition. Society of Environmental Toxicology and Chemistry North America, 34<sup>th</sup> Annual Meeting, Nashville, Tennessee, November 17-21, Poster Presentation
- Wheater, H.S.** 2013. American Geophysical Union Fall Meeting, San Francisco, CA, December 9 – 13, 2 invited lectures.
- Wheater, H.S.** 2013. Canadian Society of Petroleum Technologists - Technical Luncheon, Calgary, AB, April 8, invited speaker
- Wheater, H.S.** 2013. Conference for Interdisciplinary Engineering in Agriculture and Biosystems, University of Saskatchewan, Saskatoon, SK, July 7 - 10, plenary speaker.



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- Wheater, H.S.** 2013. Gordon Research Conference. New Hampshire, June 16 – 22, Invited.
- Wheater, H.S.** 2013. Joint Scientific Congress (CMOS, CGU, CWRA), Saskatoon, SK, May 26 – 31, Plenary Address.
- Wheater, H.S.** 2013. Peter Wolf Early Career Hydrologist’s Symposium. London, UK, March 25.
- Wheater, H.S.** 2013. Water and Agriculture in Canada: Towards Sustainable Management of Water Resources. Saskatchewan Ministry of Agriculture, Walter Scott Building, Regina, SK, September 18, Invited.
- Wheaton, E.** 2013. Agriculture in New Climates. Citizens’ Hearing on Climate Change, Saskatoon, SK, November 2, Invited Presenter.
- Wheaton, E.** 2013. How can Agriculture deal with the Risks and Benefits of a Changing Climate? Renewable Power Intelligent Choice (RPIC). Prince Albert, SK, October 29. Invited Presenter.
- Wheaton, E.** 2013. Risks and Benefits for Agriculture of a Changing Climate. Prince Albert Model Forest Board. Prince Albert, SK, October 29, Invited Presenter.
- Wheaton, E., Bonsal, B. and Wittrock, V.** 2013. Climate Extremes, Crops and Water: VACEA Progress. to the VACEA Canadian Team Meeting, Regina, SK. VACEA (Vulnerability and Adaptation to Climate Extremes in the Americas) is a project of the Prairie Adaptation Research Collaborative, Regina, SK. SRC #13224-5D13. Saskatchewan Research Council, Saskatoon, SK, November 12, Invited Presenter.