

APPENDIX E – Publications, Conference Proceedings and Presentations

Journal Publications - 2015

- Abirhire, O., North, R., Hunter, K., Vandergucht, D., Sereda, J., and Hudson, J. 2015. Environmental factors influencing phytoplankton communities in Lake Diefenbaker, Saskatchewan, Canada. *Journal of Great Lakes Research*, <http://dx.doi.org/10.1016/j.jglr.2015.07.002>.
- Ahmed, H., and Helgason, W. 2015. Reliability model for designing solar powered center pivot irrigation systems. *Transactions of the ASABE*, 58(4): 947-958, DOI:10.13031/trans.58.10930.
- Akomeah, E., Chun, K.P., and Lindenschmidt, K-E. 2015. Dynamic water quality modelling and uncertainty analysis of phytoplankton and nutrient cycles for the upper South Saskatchewan River. *Environmental Science and Pollution Research* (accepted).
- Al Nagggar, Y., Codling, G., Vogt, A., Naiem, E., Mona, M., Seif, A., and Giesy, J.P. 2015. Organophosphorous Insecticides in Honey, Pollen and Bees (*Apis mellifera* L.) and Their Potential Hazard to Bee Colonies in Egypt. *Ecotox. Environ. Safety*, 114: 1-8. DOI.org/10.1016/j.ecoenv.2014.12.039
- Al Nagggar, Y., Vogt, A., Codling, G., Naiem, E., Mona, M., Seif, A., Robertson, A., and Giesy, J.P. 2015. Exposure of Honey Bees (*Apis mellifera* L.) in Saskatchewan, Canada to Organophosphorous Insecticide. *Apidologie*, DOI: 10.1007/s13592-015-0357-y
- Amichev, B.Y., Bentham, M.J., Cerkowniak, D., Kort, J., Kulshreshtha, S., Laroque, C.P., Piwowar, J.M., and Van Rees, K.C.J. 2015. Mapping and quantification of planted tree and shrub shelterbelts in Saskatchewan, Canada. *Agroforstry Systems*, 89: 49-65.
- Arens, C.J., Hogan, N.S., Kavanagh, R.J., Mercer, A.G., van der Kraak, G.J., and van den Heuvel, M.R. 2015. Sublethal effects of aged oil sands-affected water on white sucker (*Catostomus commersonii*). *Environmental Toxicology and Chemistry*, 34: 589-599.
- Armstrong, R.N, Pomeroy, J.W. and Martz, L.W. 2015. Variability in evaporation across the Canadian Prairie region during drought and non-drought periods. *Journal of Hydrology*, 521: 182-195.
- Bai, Y.-C., Wu, F.-C., Xing, B.-S., Meng, G.-L.W., Shi, G.-L., Ma, Y., and Giesy, J.P. 2015. Isolation and Characterization of Chinese Standard Fulvic Acid Sub-fractions Separated from Forest Soil by Stepwise Elution with: Pyrophosphate Buffer. *Sci. Rep.* 5: 8723. DOI: 10.1038/srep08723
- Beitel, S.C., Doering, J.A., Eisner, B.K., and Hecker, M. 2015. Comparison of the sensitivity of four native Canadian fish species to 17- α Ethynylestradiol, using an in vitro liver explant assay. *Environ. Sci. Pollut. Res.* Accepted for Publication.
- Beníšek, M., Kukučka, P., Mariani, G., Suurkuusk, G., Gawlick, B.M., Locoro, G., Giesy, J.P., and Bláha, L. 2015. Dioxins and Dioxin-like Compounds in Composts and Digestates from European Countries as Determined by the in vitro Bioassay and Chemical Analysis. *Chemosphere*, 122: 168-175, DOI: 10.1016/j.chemosphere.2014.11.039
- Brannen, R, Spence, C. and Ireson, A.M. 2015. Influence of shallow groundwater-surface water interactions on the hydrological connectivity and water budget of a wetland complex. *Hydrological Processes*. doi:10.1002/hyp.10563

- Brown, C.D., Liu, J., Yan, G., and Johnstone, J.F. 2015. Disentangling legacy effects from environmental filters of post-fire assembly of boreal tree assemblages. *Ecology*, in press.
- Carbone, R.E., and Li, Y. 2015. Tropical Oceanic Rainfall and Sea Surface Temperature Structure: Parsing Causation from Correlation in the MJO. *Journal of Atmospheric Science*, 72(7): 2703–2718.
- Casey, L.S., and Wilson, L.D. 2015. Investigation of Chitosan-PVA Composite Films and their Adsorption Properties. *Journal of Geoscience and Environment Protection*, 3(2): 78-84.
- Changnon, M., Kreuzweiser, D., Mitchell, E.A.D., Morrissey, C.A., Noome, D.A. and Van der Sluijs, J. 2015. Risks of large scale use of systemic insecticides to ecosystem functioning and services. *Environ Sci and Poll Res (special issue)*, 22: 119–134, DOI 10.1007/s11356-014-3277-x.
- Chen, C., Wu, F.-C., Mu, Y.-S., Zhang, R.-Q., and Giesy, J.P. 2015. Derivation of Marine Water Quality Criteria for Metals Based on a Novel QICAR-SSD Model. *Environ. Sci. Pollut. Res.* 22: 4297-4304, DOI: 10.1007/s11356-014-3655-4.
- Choudhury, S., Thomas, J.K., Sylvain, N.J., Ponomarenko, O., Gordon, R.A., Heald, S.M., Janz, D.M., Krone, P.H., Coulthard, I., George, G.N., and Pickering, I.J. 2015. Selenium preferentially accumulates in the eye lens following embryonic exposure: a confocal X-ray fluorescence imaging study. *Environmental Science & Technology*, 49(4): 2255–2261, DOI: 10.1021/es503848s
- Chuang, W-C., and Gober, P. 2015. Predicting Hospitalization for Heat-Related Illness at the Census Tract Level: Accuracy of a Generic Heat Vulnerability Index in Phoenix, Arizona (USA). *Environmental Health Perspectives*, DOI:10.1289/ehp.1307868.
- Dang, Y., Giesy, J.P., Wang, J.-H., and Liu, C.-S. 2015. Dose-Dependent Compensation Responses in Hypothalamic-Pituitary-Gonadal Axis and Liver of Zebrafish Exposed to the Fungicide Prochloraz. *Aquatic Toxicol.* 160: 69–75, DOI.org/10.1016/j.aquatox.2015.01.003
- Das, A., Sagin, J., van der Sanden, J., Evans, E., MacKay, H. and Lindenschmidt, K.-E. 2015. Monitoring the freeze-up and ice cover progression of the Slave River. *Canadian Journal of Civil Engineering*, (in press), <http://dx.doi.org/10.1139/cjce-2014-0286>.
- Delavau, C., Chun, K.P., Stadnyk, T., Birks, S. J., and Welker, J. 2015. North American precipitation isotope ($\delta^{18}O$) zones revealed in time series modelling of precipitation across Canada and the northern United States. *Water Resources Research*.
- Delso, N. and 29 others alphabetically (incl. Morrissey, C.A.). 2015. Systemic insecticides (neonicotinoids and fipronil): trends, uses, mode of action and metabolites. *Environ Sci and Poll Res (special issue)*, 22:5-34, DOI 10.1007/s11356-014-3470-y
- Dhillon, G.S., Amichev, B.Y., de Freitas, R., and Van Rees, Ken. 2015. Accurate and Precise Measurement of Organic Carbon Content in Carbonate-Rich Soils. *Communications in Soil Science and Plant Analysis (Accepted Dec 3, 2014)*
- Doering, J.A., Farmahin, R., Wiseman, S., Beitel, S.C., Kennedy, S.W., Giesy, J.P., and Hecker, M. 2015. Differences in Activation of Aryl Hydrocarbon Receptors of White Sturgeon Relative to Lake Sturgeon Are Predicted by Identities of 3 Key Amino Acids in the Ligand Binding Domain. *Environ. Sci. Technol.* 49: 4681-4689, DOI: 10.1021/acs.est.5b00085
- Doering, J.A., Beitel, S.C., Eisner, B.K., Heide, T., Hollert, H., Giesy, J.P., Hecker, M., and Wiseman, S. B. 2015. Identification and Response to Metals of Metallothionein in two Ancient Fishes:

- White Sturgeon (*Acipenser transmontanus*) and Lake Sturgeon (*Acipenser fulvescens*). *Comp. Biochem. Physiol., Part C* 171: 41–48, DOI: [org/10.1016/j.cbpc.2015.03.002](https://doi.org/10.1016/j.cbpc.2015.03.002)
- Dumanski, S., Pomeroy, J.W., Westbrook, C.J. 2015. Hydrological regime changes in a Canadian prairie basin. *Hydrological Processes*, HYP-14-0856, DOI: [10.1002/hyp.10567](https://doi.org/10.1002/hyp.10567).
- Ehsanzadeh, E., van der Kamp, G. and Spence, C. 2015. On the changes in long term streamflow regimes in the Prairies. *Hydrological Sciences Journal*, doi: [10.1080/02626667.2014.967249](https://doi.org/10.1080/02626667.2014.967249)
- Ferguson, G. 2015. Screening for Heat Transport by Groundwater in Closed Geothermal Systems. *Groundwater*, 53 (3): 503-506, Wiley/National Groundwater Association.
- Ferguson, G. 2015. Issue Paper: Deep Injection of Waste in the Western Canada Sedimentary Basin. *Groundwater*, 53 (2): 187-194, Wiley/National Groundwater Association.
- Ferguson, G. and Jasechko, S. 2015. The Isotopic Composition of the Laurentide Ice Sheet and Fossil Groundwater. *Geophysical Research Letters*, 42, doi:[10.1002/2015GL064106](https://doi.org/10.1002/2015GL064106), American Geophysical Union/Wiley.
- Flahr, L.M., Michel, N.L., Zahara A.R.D., Jones, P.D., and C.A. Morrissey. 2015. Developmental exposure to Aroclor 1254 alters migratory behaviour in juvenile European starlings (*Sturnus vulgaris*). *Environmental Science and Technology*, 49(10): 6274-83.
- Fleming, C.J., McCartha, E.B., and Steelman, T.A. 2015. Conflict and Collaboration in Wildfire Management: The Role of Mission Alignment. *Public Administration Review*, 75(3): 445-454.
- Foust, R.D., Bauer, A.-M., Costanza-Robinson, M., Blinn, D.W., Prince, R.C., Pickering, I.J., and George, G.N. 2015. Arsenic transfer and biotransformation in a fully characterized freshwater food web. *Coordination Chemistry Reviews*, DOI: [10.1016/j.ccr.2015.03.005](https://doi.org/10.1016/j.ccr.2015.03.005).
- Gober, P., Strickert, G.E., Clark, D.A., Chun, K.P., Payton, D., and Bruce, K. 2015. Divergent perspectives on water security: Bridging the policy debate. *The Professional Geographer*, 67(1): 62-71.
- Gober, P. and Wheeler, H.S. 2015. Debates-Perspectives on Socio-Hydrology: Modeling flood risk as a public policy problem. *Water Resources Research*, 51, DOI:[10.1002/2015WR016945](https://doi.org/10.1002/2015WR016945).
- Green, D.J., Whitehorne, I.B.J., Middleton, H.A., and Morrissey, C.A. 2015. Do American dippers obtain a survival benefit from altitudinal migration? *PLoS ONE*, 10(4): e0125734. DOI:[10.1371/journal.pone.0125734](https://doi.org/10.1371/journal.pone.0125734)
- Guo, J.H., Chen, D., Potter, D., Rockne, K.J., Sturchio, N.C., Giesy, J.P., and Li, A. 2014. Polyhalogenated Carbazoles in Sediments of Lake Michigan: A New Discovery. *Environ. Sci. Technol.* 48: 12807-12815, DOI: [10.1021/es503936u](https://doi.org/10.1021/es503936u)
- Harder, P., Pomeroy, J., Westbrook, C.J. 2015. Hydrological resilience of a Canadian Rockies headwater basin subject to changing climate, extreme weather and forest management. *Hydrological Processes*, HYP-14-0851.
- Hassanzadeh, E., Elshorbagy, A., Wheeler, H., Gober, P., and Nazemi, A. 2015. Integrating supply uncertainties from stochastic modeling into integrated water resource management: a case study of the Saskatchewan River Basin. *ASCE's Journal of Water Resources Planning and Management*, accepted for publication, June 24, 2015.
- Hendry, M.J., Schmeling, E.E., Wassenaar, L.I., Barbour, S.L., and Pratt, D.L. 2015. Determining the stable isotope composition of pore water from saturated and unsaturated zone core: Improvements to the direct vapor equilibration laser spectroscopy method. Published as a

- discussion paper in *Hydrol. Earth Syst. Sci. Discuss (HESSD)*, the scientific discussion forum of HESS, 12: 6241-6274, doi: 10.5194/hessd-12-6241-2015, 2015, June
- Hong, S.-J., Lee, S.-W., Choi, K.-H., Kim, G.-B., Ha, S.-Y., Kwon, B.-O., Ryu, J.-S., Yim, U.-H., Shim, W.-J., Jung, J.-H., Giesy, J.P., and Khim, J.-S. 2015. Effect-Directed Analysis and Mixture Effects of AhR-active PAHs in Sediments Contaminated by the Hebei Spirit Oil Spill. *Environ. Poll.* 199: 110-119, DOI:Org/10.1016/j.envpol.2015.01.009
- Hu, X.-X. Shi, W., Yu, N.-Y., Li, J., Wei, S., Jiang, X., Wang, S.-H., Liu, H.-L., Zhang, X., Giesy, J.P., and Yu, H.-X. 2015. Bioassay-Directed Identification of Organic Toxicants in Water and Sediment of Tai Lake, China. *Water. Res.* 73: 231-241. DOI: org/10.1016/j.watres.2015.01.033.
- Huang, M., Barbour, S.L., and Carey, S. 2015. The impact of reclamation cover depth on the performance of reclaimed shale overburden at an oil sands mine in Northern Alberta, Canada. *Hydrological Processes*, 29(12): 2840-2854, doi: 10.1002/hyp.10229.
- Hudson, J., and Vandergucht, D. 2015. Spatial and Temporal Patterns in Physical Properties and Dissolved Oxygen in Lake Diefenbaker, a Large Reservoir on the Canadian Prairies. *Journal of Great Lakes Research*, <http://dx.doi.org/10.1016/j.jglr.2015.06.007>.
- Ireson, A.M., Barr, A.G., Johnstone, J.F., Mamet, S.D., van der Kamp, G., Whitfield, C.J., Michel, N.L., North, R.L., Westbrook, C.J., DeBeer, C., Chun, K.P., Nazemi, A. and Sagin, J. 2015. The changing water cycle: the Boreal Plains ecozone of Western Canada. *Wires Water*, doi: 10.1002/wat2.1098
- Jarošová, B., Filip, J., Hilscherová, K., Tuček, J., Šimek, Z., Giesy, J.P., Zbořil, R., and Bláha, L. 2015. Can Zero-valent Iron Nanoparticles Remove Waterborne Estrogens? *J. Environ. Mgt.* 150: 387-392, DOI:org/10.1016/j.jenvman.2014.12.007
- Jeirani, Z., Sadeghi, A., and Soltan, J., Roshani, B., and Rindall, B. 2015. Effectiveness of advanced oxidation processes for the removal of manganese and organic compounds in membrane concentrate, *Separation and Purification Technology*, 149: 110-115.
- Jin, X., Liu, F., Wang, Y., Zhang, L., Li, Z., Giesy, J.P., and Wang, Z. 2015. Probabilistic Ecological Risk Assessment of Copper in Chinese Offshore Area from 2005-2012. *Mar. Pollut. Bull.* DOI: 10.1016/j.marpolbul.2015.03.005
- Jin, X., Wang, Z., Wang, Y., Lv, Y., Jin, W., Giesy, J.P., and Leung, K.M.Y. 2015. Do Water Quality Criteria Based on Nonnative Species Provide Appropriate Protection for Native Species. *Environ. Toxicol. Chem.* DOI: 10.1002/etc.2985
- Karoyo, A.H., and Wilson, L.D. 2015. Nano-Sized Cyclodextrin-Based Molecularly Imprinted Polymer Adsorbents for Perfluorinated Compounds – A Mini-Review. *Nanomaterials*, 5: 981-1003, DOI:10.3390/nano5020981.
- Kehoe, M., Chun, K.P., Conrad, D., and Baulch, H.M. 2015. Who smells? Forecasting taste and odor in a drinking water reservoir with phytoplankton genus data. *Environmental Science and Technology* (accepted).
- Kinar, N.J. and Pomeroy, J.W. 2015. Measurement of the Physical Properties of the Snowpack. *Reviews of Geophysics*, 53: 481-544.
- Kinar, N.J. and Pomeroy J.W. 2015. SAS2: the system for acoustic sensing of snow. *Hydrological Processes*. DOI: 10.1002/hyp.10535
- Klaus, J., Chun, K.P., McGuire, K.J., and McDonnell, J.J. 2015. Time-variant catchment transit times and transit time distributions: A new framework for use with standard runoff and tracer datasets. *Water Resources Research*. (accepted)

- Krogh, S.A., Pomeroy, J.W., and McPhee, J. 2015. Physically Based Mountain Hydrological Modeling Using Reanalysis Data in Patagonia. *Journal of Hydrometeorology*, 16: 172-193.
- Leclair, L.A., Pohler, L., Wiseman, S.B., He, Y., Arens, C.J., Giesy, J.P., Scully, S., Wagner, B.D., van den Heuvel, M.R., and Hogan, N.S. 2015. In vitro assessment of endocrine disrupting potential of naphthenic acid fractions derived from oil sands-influenced water. *Environmental Science and Technology*, 49(9): 5743-5752.
- Ledding, J., Huang, M., Barbour, S.L., and Hendry, M.J. 2015. Characterization of the Gas and Liquid Hydraulic Conductivity of an AboveGround, Commercial Scale-Sulphur Block. *Vadose Zone Journal – First Look*, doi:10.2136/vzj2015.01.0003.
- Lee, S.-J., Chang, H., and Gober, P. 2015. Space and Time Dynamics of Urban Water Demand in Portland, Oregon and Phoenix, Arizona. *Stochastic Environmental Research and Risk Assessment*, 20(4): 1135-1147.
- Lee, S.-W., Shin, W.-H., Hong, S.-J., Kang, H.-B., Jung, D.-W., Yim, U.-H., Shim, W.-J., Khim, J.-S. Seok, C., Giesy, J.P., and Choi, K.-H. 2015. Measured and Predicted Affinities of Binding and Relative Potencies to Activate the AhR of PAHs and their Alkylated Analogues *Chemosphere*, 139: 23–29, DOI: org/10.1016/j.chemosphere.2015.05.033
- Lemelin, R.H., Koster, R., Bradford, L., Strickert, G., and Molinsky, L. 2015. People, Protected Areas and Tourism: Place Attachment in Rosspport Ontario Canada. *Scandinavian Journal of Hospitality and Tourism*, 15, DOI: 10.1080/15022250.2015.1006391
- Li, M., Barbour, L., and Si, B. 2015. "Measuring solid percentage of oil sands mature fine tailings using the heat pulse dual probe method", *Journal of Environmental Quality*, January, 44(1): 293-298, doi:10.2134/jeq2014.06.0262 (Note: A summary of this paper has been published in the *CSA News* magazine 2015 60: 15-15, doi:10.2134/csa2015-60-2-6).
- Li, Y., and Carbone, R.E. 2015. Offshore propagation of coastal precipitation. *Journal of Atmospheric Science*, Accepted, July 2015.
- Lindenschmidt, K.-E. and Das, A. 2015. A geospatial model to determine patterns of ice cover breakup and dislodgement behaviour along the Slave River. *Canadian Journal of Civil Engineering*, (in press), <http://dx.doi.org/10.1139/cjce-2014-0377>.
- Lindenschmidt, K.-E. and Carstensen, D. 2015. The upper Qu'Appelle water supply project in Saskatchewan, Canada – Upland Canal ice study. *Österreichische Wasser- und Abfallwirtschaft*, 67(5-6): 230-239. <http://dx.doi.org/10.1007/s00506-015-0235-x>.
- Lindsay, M.B.J., Moncur, M.C., Bain, J.G., Jambor, J.L., Ptacek, C.J. and Blowes, D.W. 2015. Geochemical and mineralogical aspects of sulfide mine tailings. *Applied Geochemistry*, 57: 157-177.
- Liu, H.-L., Tang, S., Zheng, X.-M., Zhu, Y.-T., Ma, Z.-Y., Liu, C.-S., Hecker, M., Saunders, D.M.V., Giesy, J.P., Zhang, X.-W., and Yu, H.-X. 2015. Bioaccumulation, Biotransformation, and Toxicity of BDE-47, 6-OH-BDE-47, and 6-MeO-BDE-47 in Early Life-Stages of Zebrafish (*Danio rerio*). *Environ. Sci. Technol.* 49: 1823–1833, DOI: 10.1021/es503833q
- Liu, Q.-L., Tang, J.-C., Bai, Z.-H., Hecker, M., and Giesy, J.P. 2015. Distribution of Petroleum Degrading Genes and Factor Analysis on Petroleum Contaminated Soil from the Dagang Oilfield, China. *Sci. Rep.* 5: 11068, DOI: 10.1038/srep11068
- Litt, M., Sicart, J.E., Helgason, W., and Wagon, P. 2015. Turbulence characteristics of the atmospheric surface layer in different wind regimes over the tropical Zongo Glacier (Bolivia, 16°S). *Boundary Layer Meteorology*, 154(3): 471-495, DOI:10.1007/s10546-014-9975-6.

- Maavaraa, T., Hood, J., North, R., Doig, L., Parsons, C., Johansson, J., Liber, K., Hudson, J.J., Lucas, B., Vandergucht, D., and Van Cappellen, P. 2015. Reactive silicon dynamics in a large prairie reservoir (Lake Diefenbaker, Saskatchewan). *Journal of Great Lakes Research*, <http://dx.doi.org/10.1016/j.jglr.2015.04.003>.
- Main A.R., Michel N.L., Headley J.V., Peru K.M., and Morrissey C.A. 2015. Ecological and landscape drivers of neonicotinoid insecticide detections and concentrations in Canada's Prairie wetlands. *Environmental Science and Technology*, 49 (14): 8367–8376.
- Maletz, S., Wollenweber, M., Kubiak, K., Müller, A., Schmitz, S., Maier, D., Hecker, M., and Hollert, H. 2015. Investigation of potential endocrine disrupting effects of mosquito larvicidal *Bacillus thuringiensis israelensis* (Bti) formulations. *Sci. Total Environ.* 536: 729-738.
- Mamet, S.D., Chun, K.P., Metsaranta, J.F., Johnstone, J.F., and Barr, A.G. 2015. Grow slow, die young: tree growth, subsurface moisture availability, and resilience of jack pine near the southern limits of the boreal forest. *Environmental Research Letters*. (accepted)
- Mantyka-Pringle, C.S., Westman, C.N., Kythreotis, A.P., and Schindler, D.W. 2015. Honoring Indigenous Treaty Rights in Canada for Climate Justice. *Nature Climate Change*, doi: 10.1038/nclimate2714
- Mantyka-Pringle, C., Visconti, P., Marco, M.D., Martin, T., Rondinini, C. and Rhodes, J.R. 2015. Climate Change Modifies Risk of Global Biodiversity Loss due to Land-Cover Change. *Biological Conservation*, 187: 103-111.
- McLeod, L., L. Bharadwaj, C. Waldner. 2015. Risk Factors Associated with perceptions of drinking water quality in rural Saskatchewan. *Canadian Water Resources Journal*, 40(1): 36-46.
- Melvin, A., Mack, M.C., Johnstone, J.F., McGuire, A.D., Genet, H., and Schuur, E.A.G. 2015. Differences in ecosystem carbon distribution and nutrient cycling linked to forest tree species composition in a mid-successional boreal forest. *Ecosystems* in press.
- Meng, J., Wang, T., Wang, P., Zhang, Y.-Q., Li, Q.-F., Lu, Y.-L., and Giesy, J.P. 2015. Are Levels of Perfluoroalkyl Substances in Soil Related to Urbanization in Rapidly Developing Coastal Areas in North China? *Environ. Pollut.* 199: 102-109, DOI: [org/10.1016/j.envpol.2015.01.022](http://dx.doi.org/10.1016/j.envpol.2015.01.022)
- Mohamed, M.H., and Wilson, L.D. 2015. Kinetic Uptake Studies of Powdered Materials in Solution. *Nanomaterials*, 5: 969-980, DOI:10.3390/nano5020969.
- Mohamed, T.A., Soliman, U.A., Shaaban, I.A., Zoghaib, W.M., and Wilson, L.D. 2015. Raman, Infrared And NMR Spectral Analysis, Normal Coordinate Analysis And Theoretical Calculations Of 5-(Methylthio)-1,3,4-Thiadiazole-2(3H)-Thione And Its Thiol Tautomer. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 150: 339-349.
- Mohamed, M.H., Wilson, L.D., Headley, J.V., Shah, J., Peru, K.M. 2015. A Novel Solid-State Fractionation of Naphthenic Acid Fraction Components from Oil Sands Process-Affected Water. *Chemosphere*, 136: 252–258, DOI: 10.1016/j.chemosphere.2015.05.029.
- Mohamed, M.H., Wilson, L.D., Headley, J.V., and Peru, K.M. 2015. Thermodynamic Properties of Inclusion Complexes Between β -Cyclodextrin and Naphthenic Acid Fraction Components. *Energy and Fuels*, 29(6): 3591–3600, DOI: 10.1021/acs.energyfuels.5b00289.
- Mohamed, M.H., Wilson, L.D., and Headley, J.V. 2015. Tuning the Physicochemical Properties of β -Cyclodextrin Based Polyurethanes via Cross-linking Conditions. *Microporous and Mesoporous Materials*, 214: 23–31.

- Mohamed, M.H., Dolatkhah, A., Aboumourad, T., Dehabadi, L. and Wilson, L.D. 2015. Investigation of templated and supported polyaniline adsorbent materials, *RSC Advances*, 5: 6976-6984.
- Moncur, M.C., Ptacek, C.J., Lindsay, M.B.J., Blowes, D.W., and Jambor, J.L. 2015. Long-term mineralogical and geochemical evolution of sulfide mine tailings under a shallow water cover. *Applied Geochemistry*, 57: 178-193.
- Morrissey, C.A., Devries, J., Mineau, P., Sanchez-Bayo, F., Liess, M., Cavallaro, M., and Liber, K. 2015. Neonicotinoid contamination of surface waters and relative risks to aquatic invertebrates: a review. *Environment International*, 74: 291-303.
- Morrison, A., Westbrook, C.J., and Bedard-Haughn, A. 2015. Distribution of Canadian Rocky Mountain wetlands impacted by beaver. *Wetlands*, 35: 95-104.
- Musselman, K.N., Pomeroy, J.W., and Link, T.E. 2015. Variability in shortwave irradiance caused by forest gaps: Measurement, modelling, and implications for snow energetics. *Agriculture and Forest Meteorology*, 207: 69-82.
- Noble, B.F., and Basnet, P. 2015. Capacity for watershed cumulative effects assessment and management in the South Saskatchewan Watershed, Canada. *Canadian Water Resources Journal*, 40(2): 187-203.
- North, R., Johansson, J., Vandergucht, D., Doig, L., Liber, K., Lindenschmidt, K., Baulch, H., and Hudson, J. 2015. Evidence for internal phosphorus loading in a large prairie reservoir (Lake Diefenbaker, Saskatchewan). *Journal of Great Lakes Research*, <http://dx.doi.org/10.1016/j.jglr.2015.07.003>.
- Painter, K., Westbrook, C.J., Hall, B.D., O'Driscoll, N.J., Jardine, T.D. 2015. Effects of in-channel beaver impoundments on mercury by bioaccumulation in Rocky Mountain stream food webs. *Ecosphere*, accepted 7 Apr, ms# ES15-00167R.
- Pan, X., Ireson, A.M., Helgason, W., and Chun, K.P. 2015. An Efficient Calibration Technique for Heat Dissipation Matrix Water Potential Sensors. *Soil Science Society of America*. doi:10.2136/sssaj14.10.0413
- Pepin, N., Bradley, R.S., Diaz, H.F., Baraer, M., Caceres, E. B., Forsythe, N., Fowler, H., Greenwood, G., Hashmi, M.Z., Liu, X.D., Miller, J.R., Ning, L., Ohmura, A., Palazzi, E., Rangwala, I., Schöner, W., Severskiy, I., Shahgedanova, M., Wang, M.B., Williamson, S.N., and Yang, D.Q. 2015. Elevation-dependent warming in mountain regions of the world. *Nature Climate Change*, 5: 424–430, doi:10.1038/nclimate2563
- Pisa, L. and 17 others (incl Morrissey, C.A.). 2015. Effects of neonicotinoids and fipronil on non-target invertebrates. *Environ Sci and Poll Res (special issue)*, 22: 68–102, DOI 10.1007/s11356-014-3471-x
- Pomeroy, J., Bernhardt, M. and Marks, D. 2015. Water resources: Research network to track alpine water. *Nature*, 521: 32.
- Poorghorban, M., Karoyo, A.H., Grochulski, P., Verrall, R.E., Wilson, L.D., and Badea, I. 2015. A 1H NMR Study of Host/Guest Supramolecular Complexes of a Curcumin Analog with β Cyclodextrin and a β CD-conjugated Gemini Surfactant. *Molecular Pharmaceutics*, 12(8): 2993–3006.
- Qin, G., Xiong, Y., Tang, S., Zhao, P., Doering, J.A., Beitel, S.C., Hecker, M., Wang, M., Liu, H., Lu, H., and Du, H. 2015. Impact of Predator Cues on Responses to Silver Nanoparticles in *Daphnia carinata*. DOI: 10.1007/s00244-015-0165-4.

- Qu, C.S., Li, B., Wu, H.-S., Wang, S., and Giesy, J.P. 2015. Multi-Pathway Assessment of Human Health Risk Posed by Polycyclic Aromatic Hydrocarbons. *Environ. Geochem. Health.* 37: 587-601, DOI: 10.1007/s10653-014-9675-7
- Razavi, S., Elshorbagy, A., Wheeler, H., and Sauchyn, D. 2015. Towards understanding non-stationarity in climate and hydrology through tree-ring proxy records. *Water Resources Research*, 51, doi:10.1002/2014WR015696
- Razavi, S., and Gupta, H. V. 2015. What do we mean by sensitivity analysis? The need for comprehensive characterization of “global” sensitivity in Earth and Environmental systems models, *Water Resources Research*, 51, doi:10.1002/2014WR016527.
- Sagin, J., Sizo, A., Wheeler, H., Jardine, T.D., Lindenschmidt, K.-E. 2015. A water coverage extraction tool for optical satellite data: application in a large river delta. *International Journal of Remote Sensing*, 36(3): 764-781, <http://dx.doi.org/10.1080/01431161.2014.1001084>.
- Saunders, D.M.V., Podaima, M., Codling, G., Giesy, J.P., and Wiseman, S. 2015. A mixture of the Novel Brominated Flame Retardants TBPH and TBB Affects Fecundity and Transcript Profiles of the HPGL-axis in Japanese Medaka. *Aquatic Toxicol.* 158: 14-21. DOI: [org/10.1016/j.aquatox.2015.01.018](http://dx.doi.org/10.1016/j.aquatox.2015.01.018)
- Saunders, D.M.V., Podaima, M., Wiseman, S., Giesy, J.P. 2015. Effects of the Brominated Flame Retardant TBCO on Fecundity and Profiles of Transcripts of the HPGL-axis in Japanese Medaka. *Aquatic Toxicol.* 160: 180–187, DOI: [org/10.1016/j.aquatox.2015.01.018](http://dx.doi.org/10.1016/j.aquatox.2015.01.018)
- Scaff, L., Yang, D., Li, Y., and Mekis, E. 2015. Inconsistency in precipitation measurements across Alaska and Yukon border. *The Cryosphere Discuss.*, 9: 3709-3739, doi:10.5194/tcd-9-3709-2015.
- Shahabul Alam, Md., and Elshorbagy, A. 2015. Quantification of the climate change-induced variations in Intensity-Duration-Frequency curves in the Canadian Prairies. *Journal of Hydrology*, 527: 990-1005.
- Shook, K., Pomeroy, J. and van der Kamp, G. 2015. The transformation of frequency distributions of winter precipitation to spring streamflow probabilities in cold regions; case studies from the Canadian Prairies. *Journal of Hydrology*, 521: 395-409, doi:10.1016/j.hydrol.2014.12.014.
- Sizo, A., Noble, B.F., and Bell, S. 2015. Futures analysis of urban land use and wetland change in Saskatoon, Canada: An application in strategic environmental assessment. *Sustainability*, 7(1): 811-830, doi: 10.3390/su7010811
- Stelman, T.A., McCaffrey, S.M., Velez, A-L.K., and Briefel, J.A. 2015. What Information do People Use, Trust, and Find Useful During a Disaster? Evidence from Five Large Wildfires. *Natural Hazards*, 76(1): 615-634.
- Strickert, G.E., Bradford, L.E. and Williams, K. 2015. Of Pings and Pongs: On Forum Theatre for Knowledge Mobilization. *International Journal of Qualitative Methodology*, ID: 24689, (Accepted In Press).
- Strickert, G.E., Chun, K.P., Bradford, L.E., Clark, D.A., Gober, P., Reed, M.G., and Payton, D. 2015. Competing viewpoints about water security in a transboundary watershed. *Water Policy* (Accepted April 27th, 2015).
- Su, H.-L., Wu, F.-C., Guo, J.-Y., Hu, Y., Feng, C.-L., Chen, C., and Giesy, J.P. 2015. Distribution Characteristics and Risk Assessments of PAHs in Fish from Taihu Lake. *Human Ecol. Risk Assess.* DOI: 10.1080/10807039.2014.975003

- Su, G.-Y., Zhang, X., Giesy, J.P., Musarrat, J., Saquib, Q., Alkhedairy, A.A., and Yu, H.-X. 2015. Molecular of Mechanisms Between Nano Zinc Oxide (ZnO) Particles and Free Zinc Ion Using a Genome-wide Toxicogenetics Approach. *Environ. Sci. Pollut. Res.* DOI: 10.1007/s11356-015-4507-6.
- Sura, S., Degenhardt, D., Cessna, A.J., Larney, F.J., Olson, A.F., and McAllister, T.A. 2015. Transport of three veterinary antimicrobials from feedlot pens via simulated rainfall runoff. *Science of the Total Environment* 521-522:191-199.
- Sura, S., Waiser, M., Tumber, V., Raina-Fulton, R., and Cessna, A.J. 2015. Effects of a herbicide mixture on primary and bacterial productivity in four prairie wetlands with varying salinities: An enclosure approach. *Science of the Total Environment* 512-513:526-539.
- Tang, Z., Guo, J., Liao, H., Zhao, X., Wu, F.-C., Zhu, Y., Zhang, L., Giesy, J.P. 2015. Spatial and Temporal Distribution and Sources of Polycyclic Aromatic Hydrocarbons in Sediments of Taihu Lake, Eastern China. *Environ. Sci. Pollut. Res.* 22: 5350–5358, DOI: 10.1007/s11356-014-3746-2
- Thomas, J., and Janz, D. 2015. Developmental and persistent toxicities of maternally deposited selenomethionine in zebrafish (*Danio rerio*). *Environmental Science and Technology*, 49(16): 10182-10189, doi: 10.1021/acs.est.5b02451
- Van der Sluijs, J.P. and 29 others alphabetically (incl. Morrissey, C.A.). 2015. Conclusions of the Worldwide Integrated Assessment on the risks of neonicotinoids and fipronil to biodiversity and ecosystem functioning. *Environ Sci and Poll Res (special issue)*, 22: 148-154, DOI 10.1007/s11356-014-3229-5
- Vardy, D.W., Doering, J.A., Santore, R., Ryan, A., Giesy, J.P., and Hecker, M. 2015. Toxicity of Metals Associated with Sediments from the Columbia River to Early Life Stages of White Sturgeon. *J. Environ. Anal. Toxicol.* 5: 262, DOI: 10.4172/2161-0525.1000262
- Vardy, D.W., Doering, J.A., Santore, R., Ryan, A., Giesy, J.P., and Hecker, M. 2015. Assessment of Columbia River Sediment Toxicity to White Sturgeon: Concentrations of Metals in Sediment, Pore water and Overlying Water. *J. Environ. Anal. Toxicol.* 5: 263, DOI: 10.4172/2161-0525.1000263
- Walker, X., Mack, M.C., and Johnstone, J.F. 2015. Stable carbon isotope analysis reveals widespread drought stress in boreal black spruce forests. *Global Change Biology*, 21: 3102-3113.
- Wang, L., Xiong, Y.-Q., Li, Q., Wu, F.-C., Lin, T., and Giesy, J.P. 2014. Vertical Distributions of Bound, Saturated Fatty Acids and Compound-specific Stable Carbon Isotope Compositions in Sediments of two Lakes in China: Implication for the Influence of Eutrophication. *Environ. Sci. Pollut. Res. Internat.* 21: 13138-13147, DOI: 10.1007/s11356-014-3219-7.
- Wang, Y., Zhang, L.-S., Meng, F.-H., Zhou, Y., Jin, X., Giesy, J.P., and Liu, F. 2015. Improvement on Species Sensitivity Distribution Methods for Deriving Site-specific Water Quality Criteria. *Envir. Sci. Pollut. Res.* DOI 10.1007/s11356-014-3783-x
- Wheater, H.S., and Gober, P. 2015. Water Security and the science agenda. *Water Resources Research*, 51(7): 5406-5424, DOI: 10.1002/2015WR016892.
- Whitfield, C.J., Baulch, H.M., Chun, K.P., and Westbrook, C.J. 2015. Beaver-mediated methane emission: The effects of population growth in Eurasia and the Americas. *Ambio*. DOI: 10.1007/s13280-014-0575-y

- Wilson, L.D., and Verrall, R.E. 2015. A Volumetric and NMR Study of Cyclodextrin-Inhalation Anesthetic Complexes in Aqueous Solutions. *Canadian J. Chemistry*, 93: 1–7.
- Xiaogang, S., Philip, M., and Daqing, Y. 2015. Warming spring air temperatures, but delayed spring streamflow in an Arctic headwater basin. *Environmental Research Letters*, 10(6), doi:10.1088/1748-9326/10/6/064003
- Xue, C. and Wilson, L.D. 2015. Design and characterization of chitosan-based composite particles with tunable interfacial properties. *Carbohydrate Polymers*, 132: 369-77, DOI: 10.1016/j.carbpol.2015.06.058
- Zahara, A.R.D., Michel, N.L., Flahr, L.M., Ejack, L.E., and Morrissey, C.A. 2015. Latent cognitive effects from low-level PCB exposure in juvenile European starlings, *Sturnus vulgaris*. *Environmental Toxicology and Chemistry*, DOI 10.1002/35c.3084
- Zhao, Y., Zhang, K., Giesy, J.P., and Hu, J. 2015. Families of Nuclear Receptors in Vertebrate Models: Characteristic and Comparative Toxicological Perspective. *Sci. Rep.* 5: 8554, DOI: 10.1038/srep08554
- Zúñiga-Benítez, H., Soltan, J., and Peñuela, G.A. 2015. Application of ultrasound for degradation of benzophenone-3 in aqueous solutions, *International Journal of Environmental Science and Technology*, (accepted for publication July 4, 2015).

Journal Publications - 2014

- Al Naggar, Y., Naiem, E., Mona, M., Giesy, J.P., and Seif, A. 2014. Metals in Agricultural Soils and Plants in Egypt. *Toxicol. Environ. Chem.* 96: 730-742, DOI: 10.1080/02772248.2014.984496
- 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.
- Amichev, B.Y., Bentham, M.J., Cerkowniak, D., Kort, J., Kulshreshtha, S., Laroque, C.P., Piwowar, J.M., and Van Rees, K.C.J. 2014. Mapping and quantification of planted tree and shrub shelterbelts in Saskatchewan, Canada, *Agroforestry Systems*. (Accepted Aug 22, 2014)
- Amichev, B.Y., Hags, R.D., Bélanger, N., Volk, T.A., Vujanovic, V., Schoenau, J.J., and Van Rees, K.C.J. 2014. First-Rotation Yields of 30 Short-Rotation Willow Cultivars in Central Saskatchewan, Canada—BioEnergy Research (Accepted Aug 5, 2014)
- Chen, Z.-J., Yang, X.-L., Liu, H., Wei, W., Zhang, K.-S., Huang, H.-B., Giesy, J.P., Liu, H.-L., Du, J., and Wang, H.-S. 2014. Bisphenol A modulates colorectal cancer protein profile and promotes the metastasis via induction of epithelial to mesenchymal transitions. *Arch. Toxicol.* DOI:10.1007/s00204-014-1301-z
- Cheng, G., and Hendry, M.J. 2014 Chemico-osmosis in geologic membranes: role of membrane potential gradient. *Geochimica et Cosmochimica Acta*, 141: 270-280, DOI:10.1016/j.gca.2014.06.017.
- Codling, G., Vogt, A., Jones, P.D., Wang, T., Wang, P., Lu, Y.-L., Corcoran, M., Bonina, S., Li, A., Sturchio, N.C., Rockne, K.J., Ji, K., Khim, J.-S., Naile, J.E., and Giesy, J.P. 2014. Historical Trends of Inorganic and Organic Fluorine in Sediments of Lake Michigan. *Chemosphere*, 114: 203-209.
- Crossman, J., Futter, M.N., Whitehead, P.G., Stainsby, E., Baulch, H.M., Jin, L., Oni, S.K., Wilby, R.L., and Dillon, P.J. 2014. Flow pathways and nutrient transport mechanisms drive

- hydrochemical sensitivity to climate change across catchments with different geology and topography. *Hydrology and Earth System Sciences*, 18: 5125-5148, DOI: 10.5194/hess-18-5125-2014
- Danek, M., Bell, T., Laroque, C., Diegor, W., Lam, R., Sylverster, P. 2014. Przykład wykorzystania analizy przyrostów rocznych drzew metodą ablacji laserowej (LA ICP-MS) w badaniach zanieczyszczenia środowiska ołowiem. [Polish with English abstract - Example of an application of tree ring laser ablation analysis (LA ICP-MS) in studies of environmental lead pollution] *Studia i Materiały CEPL w Rogowie [Proceedings of the Center for Nature and Forestry Education]*, 40: 265-272.
- Das, S., and Hendry, M.J. 2014. Characterization of hematite nanoparticles synthesized via two different pathways. *Journal of Nanoparticle Research*, 16: 1-16, DOI: 10.1007/s11051-014-2535-7.
- Das, S., Essilfie-Dughan, J., and Hendry, M.J. 2014. Arsenate adsorption onto hematite nanoparticles under alkaline conditions: Effects of aging. *Journal of Nanoparticle Research*, 16: 1-12, DOI: 10.1007/s11051-014-2490-3.
- Das, S., Essilfie-Dughan, J., and Hendry, M.J. 2014. Arsenate partitioning from ferrihydrite to hematite: spectroscopic evidence. *American Mineralogist*, 99: 749-754, DOI: <http://dx.doi.org/10.2138/am.2014.4657>.
- de Lafontaine, Y., Beauvais, C., Cessna, A.J., Gagnon, P., Hudon, C., and Poissant, L. 2014. Sulfonyleurea herbicides in an agricultural catchment and its adjacent wetland in the St. Lawrence River basin. *Journal of the Total Environment* 479-480:1-10.
- Doering, J.A., Farmahin, R., Wiseman, S., Kennedy, S.W., Giesy, J.P., and Hecker, M. 2014. Functionality of aryl hydrocarbon receptors (AhR1 and AhR2) of white sturgeon (*Acipenser transmontanus*) and implications for the risk assessment of dioxin-like compounds. *Enviro. Sci. Technol.* 48: 8219-8226.
- 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.
- Forrest, J., Bazylewski, P., Bauer, R., Hong, S.-J., Kim, C.-Y., Giesy, J.P., Khim, J.-S., and Chang, G.-S. 2014. A Comprehensive Model for Chemical Bioavailability and Toxicity of Organic Chemicals Based on First Principles. *Front. Mar. Sci.* 1(31): 1-7, DOI:10.3389/fmars.2014.00031.
- Gagnon, P., Sheedy, C., Farenhorst, C., McQueen, R., Cessna, A.J., and Newlands, N. 2014. A coupled stochastic/deterministic model to estimate the evolution of the risk of water contamination by pesticides across Canada. *Integrated Environmental Assessment and Management* 10:429-436.
- Ge, L.-C., Chen, Z.-J., Liu, H., Zhang, K.-S., Su, Q., Ma, X.-Y., Huang, H.-B., Zhao, Z.-D., Wang, Y.-X., Giesy, J.P., Du, J., and Wang, H.-S. 2014. Signaling Related with Biphasic Effects of Bisphenol A (BPA) on Sertoli Cell Proliferation: A Comparative Proteomic Analysis. *Biochem. Biophys. Acta.* 1840: 2663-2673, DOI:10.1016/j.bbagen.2014.05.018
- Gerger, C., Thomas, J., Janz, D., and Weber, L. 2014. Acute effects of β -naphthoflavone on cardiorespiratory function and metabolism in adult zebrafish (*Danio rerio*). *Fish Physiology and Biochemistry*, 41: 289-298.

- Giesy, J.P., Solomon, K.R., Mackay, D., and Anderson, J. 2014. Evaluation of Evidence that the Organophosphate Insecticide Chlorpyrifos is a Potential Persistent Organic Pollutant or Persistent, Bioaccumulative and Toxic. *Envir. Sci. Europe*. 26: 29-49. Open Access: <http://www.enveurope.com/content/26/1/29>
- Guo, R., Wilson, L., and Bharadwaj, L. 2014. Uptake of chloroform from aqueous solution with synthetically engineered copolymer materials. *Topological and Supramolecular Polymer Science*, 2014(1): 42-59.
- Hendry, M.T., Barbour, S.L., and Martin, C.D. 2014. Evaluating the effect of fibre-reinforcement on the anisotropic undrained stiffness and strength of peat. *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, 140(9): 04014054, doi: 10.1061/(ASCE)GT.1943-5606.0001154.
- Hewlett, C., North, R., Johansson, J., Vandergucht, D., and Hudson, J. 2014. Contribution of shoreline erosion to nutrient loading of the Lake Diefenbaker reservoir, Saskatchewan, Canada. *Journal of Great Lakes Research*, <http://dx.doi.org/10.1016/j.jglr.2014.11.020>.
- Hong, S.-J., Khim, J.-S., Park, J.-S., Son, H.-S., Choi, S.-D., Choi, K., Ryu, J.-S., Kim, C.-Y., Chang, G.-S., and Giesy, J.P. 2014. Species- and Tissue-Specific Bioaccumulation of Arsenicals in Various Aquatic Organisms from a Highly Industrialized Area in Pohang City, Korea. *Environ. Pollut.* 192:27-35. DOI: 10.1016/j.envpol.2014.05.004
- Hong, S.-J., Khim, J.-S., Wang, T., Naile, J.E., Park, J.-S., Kwon, B.-O., Song, S.-J., Ryu, J.-S., Codling, G., Jones, P.D., Lu, Y.-L., and Giesy, J.P. 2014. Bioaccumulation Characteristics of Perfluoroalkyl Acids (PFAAs) in Coastal Organisms from the West Coast of South Korea Chemosphere, 129: 157-163, DOI.org/10.1016/j.chemosphere.2014.06.023
- Hu, G.-J., Chen, S.-L., Shi, W., Zhang, B.-B., Zhang, Y., Huang, J., Chen, J., Giesy, J.P., and Yu, H.-X. 2014. Identification of Polycyclic Aromatic Hydrocarbons in Soils in Taizhou, East China. *Environ. Geochem. Health*, 37: 429-439, DOI 10.1007/s10653-014-9656-x
- Huang, M., Rodger, H., and Barbour, S.L. 2014. An Evaluation of Air Permeability Measurements to Characterize the Hydraulic Conductivity of Soil Reclamation Covers. *Canadian Journal of Soil Science*, doi: 10.4141/CJSS-2014-072.
- Jarošová, B., Erseková, A., Hilscherová, K., Loos, R., Gawlik, B., Giesy, J. P., and Bláha, L. 2014. Europe-wide monitoring of estrogenicity in wastewater treatment plant effluents: the need for the effect-based monitoring. *Environ. Sci. Pollut. Res.* 21: 10970-10982, DOI 10.1007/s11356-014-3056-8.
- Jonas, A., Scholz, S., Fetter, E., Sychrova, E., Novakova, K., Ortmann, J., Benisek, M., Adamovsky, O., Giesy, J.P. and Hilscherova, K. 2014. Endocrine, Teratogenic and Neurotoxic Effects of Cyanobacteria Detected by Cellular in Vitro and Zebrafish Embryos Assays. *Chemosphere*, 120: 321-327, DOI:org/10.1016/j.chemosphere.2014.07.074
- Kong, P., Luo, W., Lu, Y., Wang, T., Jiao, W., Hu, W., Naile, J.E., Khim, J.S., and Giesy, J.P. 2014. Distribution and Bioaccumulation of Lead in Coastal Watersheds of Northern Bohai and Yellow Seas in China. *Environ. Geochem. Health*, 37: 491-506, DOI: 10.1007/s10653-014-9664-x
- Kwon, J.H., Wilson, L.D., and Sammynaiken, R.S. 2014. Synthesis and characterization of magnetite and activated carbon binary composites. *Synthetic Metals*, 197: 8-17.

- Larsson, M., Giesy, J.P., and Engwall, M. 2014. AhR-mediated Activities of Polycyclic Aromatic Compound (PAC) Mixtures are Predictable by the Concept of Concentration Addition. *Environ. Internat.* 73: 94–103, DOI:org/10.1016/j.envint.2014.06.011
- Lemoine, N., and Patrick, R. 2014. Water Governance in Northern Saskatchewan: Opportunities and Challenges. *Canadian Journal of Urban Research*, 23(1 Supplement): 46-60.
- Lindenschmidt, K.-E. and Sereda, J. 2014. The impact of macrophytes on winter flows along the Upper Qu'Appelle River. *Canadian Water Resources Journal*, 39(3): 342-355 <http://dx.doi.org/10.1080/07011784.2014.942165>.
- Liu, K., Elliott, J.A., Lobb, D.A., Flaten, D.F., and Yarotski, J. 2014. Conversion of Conservation Tillage to Rotational Tillage to Reduce Phosphorus Losses during Snowmelt Runoff in the Canadian Prairies. *J. Environ. Qual.* 43: 1679-1689, DOI:10.2134/jeq2013.09.0365
- Liu, K., Elliott, J.A., Lobb, D.A., Flaten, D.F., and Yarotski, J. 2014. Nutrient and Sediment Losses in Snowmelt Runoff from Perennial Forage and Annual Cropland in the Canadian Prairies. *J. Environ. Qual.* 43: 1644-1655, DOI:10.2134/jeq2014.01.0040
- Liu, Y., Yang, W., Yu, Z., Lung, I., Yarotski, J., Elliott, J., and Tiessen, K. 2014. Assessing the effects of small dams on stream flow and water quality in an agricultural watershed. *J. Hydrologic Engineering*, DOI:10.1061/(ASCE)HE.1943-5584.0001005
- Liu, Q.P., Giesy, J.P., and Li, J.H. 2014. Spatio-Temporal Distributions and Environmental Safety Threshold of Cropland Fertilization of Jiangsu Province, China. *Journal of Advanced Material Research*, 962-965: 2110-2115, DOI:10.4028/www.scientific.net/AMR.962-965.2110.
- Liu, Q.P., Giesy, J.P., and Li, J.H. 2014. Spatio-Temporal Effects of Fertilization in Jiansu Province, China. *Journal of Advanced Material Research*, 962-965: 2110-2115, DOI: 10.4028/www.scientific.net/AMR.962-965.2110
- Liu, Q.-P., Guo, Y.-L., and Giesy, J.P. 2014. Assessment of Ecological Safety of Farmland Fertilization in China. *Journal of Advanced Material Research*, 962-965: 2170-2174. DOI:10.4028/www.scientific.net/AMR.962-965.2170
- Liu, Q.-P., Guo, Y.-L., and Giesy, J.P. 2014. Spatio-temporal Effects of Fertilization in Anhui Province, China. *Environ. Dev. Sustain*, DOI 10.1007/s10668-014-9600-3
- Lu, Z.-B., Song, L., Zhao, Z., Ma, Y., Wang, J., Yang, H., Ma, H., Cai, M.-H., Codling, G., Ebinghaus, R., Xie, Z. and Giesy, J.P. 2014. Occurrence and Trends in Concentrations of Perfluoroalkyl Substances (PFASs) in Surface Waters of Eastern China. *Chemosphere*, 119: 820-827, DOI.org/10.1016/j.chemosphere.2014.08.045
- Main, A.R., Headley, J.V., Peru, K.M., Michel, N.L., Mineau, P., Cessna, A.J., and Morrissey, C.A. 2014. Widespread distribution and frequent contamination of Prairie Pothole wetlands with neonicotinoid insecticides. *PLoS ONE* 9:1-12.
- Maier, D., Blaha, L., Giesy, J.P., Henneberg, A., Köhler, H.-R., Kuch, B., Osterauer, R., Peschke, K., Richter, D., Scheurer, M. and Tribskorn, R. 2014. Biological Plausibility as a Tool to Associate Analytical Data for Micropollutants and Effect Potentials in Wastewater, Surface Water, and Sediments with Effects in Fishes. *Water Res.* 72: 127-44, DOI: 10.1016/j.watres.2014.08.050
- Man, Y.-B., Chow, K.-L., Wang, H.-S., Sun, X.-L., Wu, S.-C., Cai, Z.-W., Kang, Y., Li, H., Zheng, J.-S., Giesy, J.P., and Wong, M.-H. 2014. Human Health Risk Assessment of Soil Dioxin/furans Contamination and Dioxin-like Activity Determined by Ethoxyresorufin O-deethylase Bioassay. *Environ. Sci. Pollut. Res.* (In Press), DOI: 10.1007/s11356-014-3909-1

- Mantyka-Pringle, C., and Kythreotis, A.P. 2014. Climate policy: Translating public action into policy. *Nature*, 514(7524): 567-567.
- Mantyka-Pringle, C. 2014. Riparian restoration mitigates the impacts of climate change. *Wetlands Australia*, 25: 75-75.
- Mantyka-Pringle, C., Martin, T.G., Moffatt, D.B., Linke, S. and Rhodes, J.R. 2014. Understanding and Predicting the Combined Effects of Climate Change and Land-Use Change on Freshwater Macroinvertebrates and Fish. *Journal of Applied Ecology*, 51(3): 572-581.
- McPhee, L., and Janz, D. 2014. Dietary selenomethionine exposure alters swimming performance, metabolic capacity and energy homeostasis in juvenile fathead minnow. *Aquatic Toxicology*, 55: 91-100.
- Meng, J., Wang, T., Wang, P., Giesy, J.P., and Lu, Y.-L. 2014. Perfluoroalkyl Substances and Organochlorine Pesticides in two Sediments from Huaihe Watershed in China. *J. Environ. Sci.* 26: 2198–2206, DOI: [org/10.1016/j.jes.2014.09.002](https://doi.org/10.1016/j.jes.2014.09.002)
- Morgan, B., Patrick, R., and Bowden, M-A. 2014. Water Governance in the Saskatchewan River Basin: A Preliminary Study. *Journal of Rural and Community Development*, 9(4): 34-48.
- Nowell, B. and Steelman, T. 2014. Communication under Fire: Emergence, Embeddedness and Performance in Disaster Response Networks. *Journal of Public Administration Theory and Planning*, Published online July 1, 2014, doi: [10.1093/jopart/muu021](https://doi.org/10.1093/jopart/muu021)
- Nusrin, Tong, S.K.H., Chaturvedi, G., Wu, R.S.S., Giesy, J.P., and Kong, R.Y.C. 2014. Regulation of CYP11B1 and CYP11B2 steroidogenic genes by hypoxia-inducible miR-10b in H295R cells. *Mar. Pollut. Bull.* 85: 344-351, DOI: [10.1016/j.marpolbul.2014.04.002](https://doi.org/10.1016/j.marpolbul.2014.04.002).
- Parsons, M.J., Long, D.T., Giesy, J.P., and Kannan, K. 2014. Inferring Sources for Mercury to Inland Lakes using Sediment Chronologies of Polycyclic Aromatic Hydrocarbons. *Environ. Sci.: Proc. Impact*, DOI: [10.1039/c4em00127c](https://doi.org/10.1039/c4em00127c). (In Press)
- Patrick, R. 2014. Source water protection planning: A role for planners. *Alberta Professional Planners Institute Journal*, 13: 12-15.
- Patrick, R., and Espeseth, D. 2014. A Planning Tool for the Protection of Drinking Water Sources in Canada. *Plan Canada*, 54(4): 28-33.
- Pennock, D.J., Bedard-Haughn, A., Kiss, J., and van der Kamp, G. 2014. Application of hydrogeology to predictive mapping of wetland soils in the Canadian Prairie Pothole Region. *Geoderma*, 235-236: 199-211.
- Phalen, L.J., Kollner, B., Leclair, L.A., Hogan, N.S., and van den Heuvel, M.R. 2014. The effects of benzo[a]pyrene on leukocyte distribution and antibody response in rainbow trout (*Oncorhynchus mykiss*). *Aquatic Toxicology*, 147: 121-128.
- Saunders, D.M.V., Podaima, M., Coddling, G., Giesy, J. P., and Wiseman, S. 2015. A Mixture of the Novel Brominated Flame Retardants TBPH and TBB Affects Fecundity and Transcript Profiles of the HPGL-Axis in Japanese Medaka. *Aquatic Tox.* 158: 14–21, DOI: [10.1016/j.aquatox.2014.10.019](https://doi.org/10.1016/j.aquatox.2014.10.019)
- Shi, R., Yang, C.-H., Su, R.-H., Jin, J., Chen, Y., Liu, H.-L., Giesy, J.P., and Yu, H-X. 2015. Weighted Species Sensitivity Distribution Method to Derive Site-specific Quality Criteria for Copper in Tai Lake, China. *Envir. Sci. Pollut. Res.* 21: 12968-12978, DOI [10.1007/s11356-014-3156-5](https://doi.org/10.1007/s11356-014-3156-5)
- Sicart, J.E., Litt, M., Helgason, W., Ben Tahar, V., and Chaperon, T. 2014. A study of the atmospheric surface layer and roughness lengths on the high-altitude tropical Zongo glacier, Bolivia. *Journal of Geophysical Research: Atmospheres*, 119(7): 3793–3808.

- Strickert, G.E. 2014. Water and the Future of Humanity - Revisiting Water Security. Book Review, TCWR Canadian Water Resources Journal / Revue canadienne des ressources hydriques 40(1), DOI: 10.1080/07011784.2014.985515.
- Su, G.Y., Saunders, D., Yu, Y.J., Yu, H.X., Zhang, X., Liu, H.L., and Giesy, J.P. 2014. Occurrence of Additive Brominated Flame Retardants (PBDEs and HBCDs) in Aquatic Organisms from Tai Lake and Yangtze River in Eastern China, 2009-2012. Chemosphere, 114: 340-346, DOI:org/10.1016/j.chemosphere.2014.05.046
- Su, G.Y., Yu, H.X., Lam, M.H.W., Giesy, J.P., and Zhang, X. 2014. Mechanisms of Toxicity of HO-PBDEs' Determined by Toxicogenomic Analysis with Live Cell Array Coupled with Mutagenesis in E. coli. Environ. Sci. Technol., 48: 5929-5937, DOI: 10.1021/es5003023
- Su, G.-Y., Letcher, R., Crump, D., Giesy, J.P., and Kennedy, S.W. 2014. Photolytic Degradation Products of Two Highly Brominated Flame Retardants Cause Cytotoxicity and mRNA Expression Alterations in Chicken Embryonic Hepatocytes. Environ. Sci. Technol. 48: 12039-46, DOI: 10.1021/es503399r.
- Sura, S., Degenhardt, D., Cessna, A.J., Larney, F.J., Olson, A.F., and McAllister, T.A. 2014. Dissipation of three veterinary antimicrobials in beef cattle manure stockpiled over winter. Journal of Environmental Quality 43:1061-1070.
- Thomas, J., and Janz, D. 2014. In ovo exposure to selenomethionine via maternal transfer increases developmental toxicities and impairs swim performance in F1 generation zebrafish (Danio rerio). Aquatic Toxicology, 152: 20-29.
- Tompsett, A.R., Higley, E., Pryce, S., Giesy, J.P., Hecker, M. and Wiseman, S. 2014. Transcriptional Changes in African Clawed Frogs (Xenopus laevis) Exposed to 17 α -ethinylestradiol During Development. Ecotoxicol. 24: 321-9, DOI: 10.1007/s10646-014-1380-x
- van den Heuvel, M.R., Hogan, N.S., MacDonald, G.Z., Berrue, F., Young, R., Arens, C.J., Kerr, R.G., and Fedorak, P.M. 2014. Accumulation and biliary excretion of naphthenic acids in yellow perch exposed to oil sands-affected waters. Chemosphere, 95: 619-627
- Villeneuve, D.L., Crump, D., Garcia-Reyero, N., Hecker, M., Hutchinson, T., LaLone, C.A., Landesmann, B., Lettieri, T., Munn, S., Nepelska, M., Ottinger, M.A., Vergauwen, L., and Whelan, M. 2014. Adverse Outcome Pathway (AOP) Development I: Strategies and Principles. Tox. Sci. 142: 312-320.
- Villeneuve D.L., Crump D., Garcia-Reyero N., Hecker M., Hutchinson T., LaLone C.A., Landesmann B., Lettieri T., Munn S., Nepelska M., Ottinger M.A., Vergauwen L., and Whelan, M. 2014. Adverse Outcome Pathway (AOP) Development II: Best Practices. Tox. Sci. 142: 321-330.
- Wang, T., Wang, P., Meng, J., Liu, S., Lu, Y.-L., Khim, J.-S., and Giesy, J.P. 2014. A Review of Sources, Multimedia Distribution and Health Risks of Perfluoroalkyl Acids (PFAAs) in China. Chemosphere, 129: 87-99, DOI:org/10.1016/j.chemosphere.2014.09.021
- Wei, X., Wan, H.T., Zhao, Y.G., Wong, M.H., Giesy, J.P., and Wong, C.K.C. 2012. Effects of Perinatal Exposure to Bisphenol A and di(2-ethylhexyl)-phthalate on Gonadal Development of Male Mice. Environ. Sci. Pollut. Res. 19: 2515-2527. DOI 10.1007/s11356-012-0827-y
- Wen, Q.W., Liu, H.-L., Zhu, Y.-T., Zheng, X.-M., Su, G.Y., Zhang, X.-W., Yu, H.X., Giesy, J.P., and Lam, M.H.W. 2014. Maternal Transfer, Distribution, and Metabolism of BDE-47 and its Related Hydroxylated, Methoxylated Analogues in Zebrafish (Danio rerio). Chemosphere, 120: 31-36, DOI:org/10.1016/j.chemosphere.2014.05.050

- Wilson, L.D. 2014. Chitosan-based Materials and Their Application toward Arsenic Removal from Water. *Water Conditioning & Purification International Magazine*, 56(12): 28-33.
- Yip, H.D., Johansson, J. and Hudson, J. 2014. A 29-year assessment of the water clarity and chlorophyll-a concentration of a large reservoir: Investigating spatial and temporal changes using Landsat imagery. *Journal of Great Lakes Research*, <http://dx.doi.org/10.1016/j.jglr.2014.11.022>.
- Zhan, W., Ju, W., Hai, S., Ferguson, G., Quan, J., Tang, C., Guo, Z., and Kong, F. 2014. Satellite-Derived Subsurface Urban Heat Island. *Environmental Science & Technology*, 48(20): 12134-12140, American Chemical Society.
- Zúñiga-Benítez, H., Soltan, J., and Peñuela, G.A. 2014. Ultrasonic degradation of 1-H-Benzotriazole in water, *Water Science and Technology*, 70(1): 152-159.

Conference Proceedings and Presentations - 2015

- Abirhire O., North, R., Hunter, K., Vandergucht, D., Sereda, J., and Hudson, J. 2015. Trophic State and Environmental Factors Associated With Phytoplankton Dynamics in Lake Diefenbaker. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Amadi, C., Farrell, R. and Van Rees, K. 2015. Effect of shelterbelts on agricultural greenhouse gas mitigation. A modelling approach. Soils and Crops Conference, Saskatoon Saskatchewan, March.
- Amadi, C., Farrell, R. and Van Rees, K. 2015. Carbon dioxide, Methane and Nitrous oxide in shelterbelts and cropped fields across Saskatchewan, Canada. Soils and Crops Conference, Saskatoon Saskatchewan, March.
- Amos, M., Barbour, S.L., Pratt, D., and Si, B. 2014. Development of a Time Domain Reflectometry Sensor for Cone Penetration Testing. GeoRegina 2014, 67th Canadian Geotechnical Conference Proceedings, Sept.28-Oct.1.
- Appels, W.M., Ireson, A.M.I., McDonnell, J., and Barbour, S.L. 2015. Soil and vegetation development affect the evolution of hydrological pathways in engineered hillslopes. Oral presentation H13A-01 - Abstract 35736 in: http://www.gac.ca/wp/wp-content/uploads/2011/09/2015_Joint_Assembly_Abstract_Proceedings.pdf, Joint Assembly (AGU-GAC-MAC-CGU), Montreal Cda, May 3-7.
- Appels, W.M., Ireson, A.M.I., and Barbour, S.L. 2015. Preferential unsaturated flow and transport in heterogeneous mine waste rock dumps. Poster H44B-0186, Joint Assembly (AGU-GAC-MAC-CGU), Montreal Cda, May 3-7.
- Appels, W.M., Ireson, A.M.I., McDonnell, J., and Barbour, S.L. 2015. Evolution of hydrological pathways in engineered hillslopes due to soil and vegetation development. HS 2.3.1, Abstract EGU2015-9528 (<http://meetingorganizer.copernicus.org/EGU2015/EGU2015-9528.pdf>), Poster in: 'Understanding catchment and hillslope responses: from changing states and non-linearities to emergent behaviours', EGU General Assembly 2015, Vienna, Austria, April 12-17.

- Appels, W.M., Ireson, A.M., and Barbour, S.L. 2014. Coming Through! Simulation of preferential unsaturated flow and transport in mine waste rock dumps. 2014 GSA Annual Meeting in Vancouver, British Columbia, Poster Presentation, Abstract only published (No. 248278) in GSA Abstracts with Programs Vol. 46, No. 6, Session 296-7: "T103. Mining and the Environment: Addressing Common Challenges Faced across the Mining Industry (Posters)", Oct. 22.
- Appels, W.M., Ireson, A., Barbour, S.L. and McDonnell, J.J. 2014. Stable Isotope Applications to Understand Soil Reclamation Cover Hydrology. 2014 GSA Annual Meeting, Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 248308) in GSA Abstracts with Programs Vol. 46, No. 6, Session 161-8: " Oral presentation T161 (Hendry, Barbour): Application of Isotopes of Water to Characterize Hydrogeological Processes in Mine Environments", Oct. 20.
- Barbour, S.L., and Hendry, M.J. 2015. Development of in-situ vapour sampling for stable isotopes of water within unsaturated mine waste. Poster 098p, Internat. Symp. On Isotope Hydrology (IAEA), Vienna Austria, May 13.
- Barbour, S.L., Hendry, M.J. and Carey, S.K. 2014. Characterizing Net Percolation through Coal Mine Waste Rock Dumps using High-Resolution Profiles of Stable Isotopes of Water. 2014 GSA Annual Meeting, Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 249337) in GSA Abstracts with Programs Vol. 46, No. 6, Session 161-4: " T161 (Hendry, Barbour): Application of Isotopes of Water to Characterize Hydrogeological Processes in Mine Environments", Oct. 20. Barbour Presenting.
- Berry, P., Belcher, K., and Lindenschmidt, K.-E. 2015. Adapting to climate change on the Canadian Prairies: Can on-farm surface water retention systems provide an economically viable water management solution? Canadian Water Resources Association annual conference, 2-4 June, Winnipeg, Manitoba.
- Bharadwaj, L., Waldner, C., Johnston, P., Zagozewski, R. 2015. Water Regulations: Impacts on First Nations Health and Equity and Promotion. Touchwood Agency Tribal Council March 16, 2015.
- Bianchini, K. and Morrissey, C.A. 2015. Investigating the mechanistic links between industrial pollutant exposure and impaired pre-migratory fuelling among shorebird species. Annual Meeting of the Canadian Section of The Wildlife Society, Saskatoon, SK. 15 March.
- Birkham, T., O’Kane, M., Goodbrand, A., Barbour, S.L., Carey, S.K, Straker, J., Baker, T., and Klein, R. 2014. Near-surface water balances of coal waste rock deposits. Paper B.C.’s 38th Annual Mine Reclamation Symposium, TRCR, The British Columbia Technical and Research Committee on Reclamation), Canada, British Columbia, Prince George, Sept. 22-25.
- Birkham, T., Barbour, S.L., Goodbrand, A., Tallon, L., Szmigielski, J., and Klein, R. 2014). Assessing groundwater discharge to streams with distributed temperature sensing technology. Paper B.C.’s 38th Annual Mine Reclamation Symposium, TRCR, The British Columbia Technical and Research Committee on Reclamation), Canada, British Columbia, Prince George, Sept. 22-25.
- Buchynski, M., Barbour, S.L., and Hendry, M.J. 2015. “Characterizing the transport of the stable isotopes of Water in unsaturated mining waste”. In: ‘Mining Waste Management and

- Environmental Geotechnology: Mine Waste Disposal', GeoQuebec 2015, 68th Canadian Geotechnical Conference, Quebec City, Sept. 20-23.
- Buchynski, M.G., Barbour, S.L. and Hendry, M.J. 2014. Estimating Diffusion Rates of the Stable Isotopes of Water in Unsaturated Mine Waste. 2014 GSA Annual Meeting, Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 246546) in GSA Abstracts with Programs Vol. 46, No. 6, Session 161: " T161-3 (Hendry, Barbour): Application of Isotopes of Water to Characterize Hydrogeological Processes in Mine Environments", Published Abstract, Oct. 20.
- Carey, S.K., Hendry, M.J., Barbour, S.L. and Shatilla, N.J. 2014. Using Stable Isotopes to Understand the Movement of Water in Watersheds influenced by Surface Mining, Elk Valley, British Columbia, Canada. 2014 GSA Annual Meeting, Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 249097) in GSA Abstracts with Programs Vol. 46, No. 6, Session 161: " T161-1 (Hendry, Barbour): Application of Isotopes of Water to Characterize Hydrogeological Processes in Mine Environments", Oct. 20.
- Carr, M.K., Watkinson, D.A., and Lindenschmidt, K.-E. 2015. Identifying Links between Geomorphic Response Units (GRU) and Fish Species Distribution in the Assiniboine River, Manitoba. Canadian Water Resources Association annual conference, 2-4 June, Winnipeg, Manitoba.
- Cavallaro, M., Main, A., Phillips, I., Peru, K., Headley, J., Liber, K., and Morrissey, C. 2015. WildEcol Seminar Series: Pesticides and Potholes: Potential Risks Neonicotinoids Pose to Aquatic Insect Communities. Supported by: Environment Canada and University of Saskatchewan. Saskatoon, SK. February.
- Conway, A.C., and Johnstone, J.F. 2015. Effects of mammalian herbivores on tree growth in early post-fire succession forests. Canadian Society for Ecology and Evolution annual meeting, Saskatoon, SK, May 2015.
- Cruz-Hernández, P., Pérez-López, R., Parviainen, A., Lindsay, M.B.J., and Nieto, J.M. 2015. behavior of trace metals during aging Fe beaker acid drainage. Proceedings of the XXXV Reunión Científica de la Sociedad Española de Mineralogía, June 30 – July 3, Huelva, Spain.
- Dangeti, S., Roshani, B., McBeth, J. M., and Chang, W. 2015. Pilot-scale biofiltration of iron- and manganese-contaminated groundwater at low in-situ temperatures at a water treatment plant in Saskatchewan. 2015 CSCE Annual Conference Proceedings, Regina, May 27-30, 2015.
- Das, A., and Lindenschmidt, K.-E. 2015. Monitoring ice cover characteristics and behaviour along the Slave River. Canadian Water Resources Association annual conference, 2-4 June, Winnipeg, Manitoba.
- Dehabadi, L., and Wilson, L.D. 2015. 2014 Synthetically Engineered starch-based biomaterials and their sorption properties in aqueous solution, U of S GIWS Symposium, Saskatoon, SK. (March 2015).
- Dehabadi, L., and Wilson, L.D. 2015. An NMR investigation of the adsorptive uptake of water-ethanol mixtures with cellulose and cross-linked cellulose adsorbents, 98th CSC Conference, Ottawa, ON. (June 2015).

- Dehabadi, L., and Wilson, L.D. 2015. Polysaccharide-based materials and their adsorption properties in aqueous solution, 2015 U of S Graduate Students Symposium, Saskatoon. SK. (May 2015).
- Dhillon, G. S., and Van Rees, K. C. J. 2015. Spectroscopic Characterization of Soil Organic Carbon under Shelterbelts. Soils and Crops Conference, March, Saskatoon, Canada.
- Dolatkhah, A., Mohamed, M.H., Aboumourad, T., and Wilson, L.D. 2015. Investigation of templated and supported polyaniline adsorbent materials, 98th CSC Conference, Ottawa, ON. (June 2015).
- Dolatkhah, A., Mohamed, M.H., Aboumourad, T., and Wilson, L.D. 2015. Equilibrium and Kinetics Uptake Properties of Polyaniline (PANI) Materials With Methylene Blue in Aqueous Solutions, 2015 U of S Graduate Students Symposium, Saskatoon. SK. (May 2015).
- Dompierre, K., and Barbour, S.L. 2015. Evaluation of thermal properties of oil sand fluid fine tailings. In: 'Mining Waste Management and Environmental Geotechnology: Mine Waste Disposal', GeoQuebec 2015, 68th Canadian Geotechnical Conference, Quebec City, Sept. 20-23.
- Dompierre, K., and Barbour, S.L. 2015. Characterisation of physical mass transport through oil sands fluid fine tailings in an end pit lake: a multi-tracer study. In Session: 'Groundwater issues associated with mining and aggregate extraction', IAH – CNC 2015 Waterloo Conference, Waterloo, ON, 27-30 October, 2015.
- Dompierre, K. and Barbour, S.L. 2014. Profiling Stable Isotopes of Water Signatures to Define Mass Transport Mechanisms from Water Capped Fluid Fine Tailings in the Oil Sands Industry. 2014 GSA Annual Meeting, Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 244877) in GSA Abstracts with Programs Vol. 46, No. 6, Session 161-9: "T161 (Hendry, Barbour): Application of Isotopes of Water to Characterize Hydrogeological Processes in Mine Environments", Oct. 20.
- Dompierre, K, Barbour, S.L. and Wheeler, H. 2014. Characterization of the thermal regime through oil sands fluid fine tailings in an End Pit Lake. GeoRegina 2014, 67th Canadian Geotechnical Conference Proceedings, Sept.28-Oct.1.
- Elshorbagy, A., and Alam, S. 2015. Downscaling of Extreme Precipitation: Proposing a New Statistical Approach and Investigating a Taken-for-Granted Assumption. General Assembly of the European Geosciences Union, Vienna, Austria, April 12-17 (Abstract and oral presentation EGU2015-7872).
- Elshorbagy, A., Hassanzadeh, E., Wheeler, H. and Gober, P. 2015. A Risk-Based Framework to Assess Long-term Effects of Policy and Water Supply Change on Water Resource Systems. General Assembly of the European Geosciences Union, Vienna, Austria, April 12-17 (Abstract and oral presentation EGU2015-7656).
- Ford, L. and Bharadwaj, L. 2015. Groundwater Consumption in Rural Communities: Impact of Risk Perception on Human Health Risk. Connecting Water Resources 2015: From Knowledge to Action, Canadian Water Network, Ottawa, March 10-12.

- Giesy, J.P. 2015. Aquatic Impact Assessment of Municipal Effluents (AIME): A Toolbox Approach, With: M. Hecker, T. Bagatim, G. Codling, S. Hanson, N. Hogan, A. Hontela, P. Jones, H. Peng, B. Sarauer, K. Steeves, S. Wiseman. To: 25th Annual meeting, May 4-8, Barcelona, Spain.
- Giesy, J.P. 2015. Identification and Toxicity Assessment of Classes of Compounds Contributing to the Acute Toxicity of Oil Sands Process Affected Water, With: G. Morandi, S. Wiseman, K. Zhang, A. dos Santos Pereira, and J.W. Martin. To: 25th Annual meeting, May 4-8, Barcelona, Spain.
- Giesy, J.P. 2015. Emerging Contaminants of Urban Origin: Sources, Sampling, Analytical Issues and Remediation Techniques, with: G. Codling, H.-D. Yuan, P.D. Jones and M. Hecker. To: 25th Annual meeting, May 4-8, Barcelona, Spain.
- Giesy, J.P. 2015. Altered Reproductive Capacity of Japanese Medaka Exposed to Maternally Transferred TBCO, with: S. Wiseman, D. Saunders, J. Sun, H. Peng, S. Tang, J. Kuzma, M. Hecker. To: 25th Annual meeting, May 4-8, Barcelona, Spain.
- Giesy, J.P. 2015. Detection, Identification and Quantification of Hydroxylated Isomers of Bis(2ethyl-hexyl)-tetraaromophthalate, with: D. Saunders, H. Peng, J. Sun, S. Wiseman, P.D. Jones. To: 25th Annual meeting, May 4-8, Barcelona, Spain.
- Gonda, J., Elshorbagy, A., and Wheeler, H. 2015. Environmental Flow and Economy in the Bow River Basin: Reaching a Compromise Through a Hydro-Economic Model. Proc. 22nd Canad. Hydrotech. Conf., Montreal, QC, Canada, Apr 29 - May 2, 8 pp.
- Harley, R., Bergamo, P., Hughes, D., Donohue, S., Carse, L., and Barbour S.L. 2015. Estimation of the small strain stiffness of glacial till using geophysical methods and barometric loading response. In: 'Soil and Terrain Characterization: In situ Testing', GeoQuebec 2015, 68th Canadian Geotechnical Conference, Quebec City, Sept. 20-23.
- Harley, R., Sivakumar, V., Hughes, D., Lynch, K., and Barbour, S.L. 2014. Progressive deformation of glacial till due to viscoplastic straining and pore pressure variation. GeoRegina 2014, 67th Canadian Geotechnical Conference Proceedings, Sept.28-Oct.1.
- Hassanzadeh, E., Elshorbagy, A., Nazemi, A., Wheeler, H., and Gober, P. 2015. Integrated Water Resource Management Under Water Supply and Irrigation Development Uncertainty. Proc. 22nd Canad. Hydrotech. Conf., Montreal, QC, Canada, Apr 29 - May 2, 4 pp.
- Hodges, G., Falciani, F., Ankley, G., Butler, E., Hecker, M., Tollefsen, K.E., Garcia-Reyero, N., Kille, P., Becker, D., Brockmeier, E., Chipman, K., Colbourne, J., Collette, T., Cossins, A., Cronin, M., Graystock, P., Gutsell, S., Knapen, D., Katsiadaki, I., Lange, A., Marshall, S., Owen, S., Perkins, E.J., Plaistow, S., Schroeder, A., Taylor, D., Vian, M. and Hutchinson, T.H. 2015. Potential Roles of Omics Data in the use of Adverse Outcome Pathways for Environmental Risk Assessment. SETAC Europe 25th Annual Meeting, May 3-7, Barcelona, Spain.
- Horachek, M.E., Johnstone, J.F., and Laroque, C. 2015. Radial growth patterns of jack pine in relation to climate, moisture availability, and dwarf mistletoe infection in the Boreal Plains Ecozone of Saskatchewan, Canada. Canadian Society for Ecology and Evolution annual meeting, Saskatoon, SK, May 2015.

- Hosseini Safa, H., Elshorbagy, A., and Wheeler, H. 2015. Balancing Economic and Environmental Protection Goals in Water Resources Management in the Oldman River Basin. Proc. 22nd Canad. Hydrotech. Conf., Montreal, QC, Canada, Apr 29 - May 2, Poster.
- Hudson J., Vandergucht, D., Hunter, K., North, R., Sereda, J., Wheeler, H., and Davies, J. 2015. An Overview of The Lake Diefenbaker Study. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Hunter, K., Johansson, J., North, R., Vandergucht, D., Abirhire, O., Sereda, J. and Hudson, J. 2015. Light and Nutrient Effects on Phytoplankton Populations in Lake Diefenbaker, a Large Prairie Reservoir. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Huyhn, M., and Bharadawaj, L. 2015. Cyanotoxin at Saskatchewan Lakes in 2013– Canadian Water Network – From Knowledge to Action; Connecting water resources conferences, March 10-12, Ottawa, ON.
- Jean, M.J., Melvin, A.M., Mack, M.C., and Johnstone, J.F. 2015. Room to breathe: impacts of environment and leaf litter on moss growth and N-fixation. Canadian Society for Ecology and Evolution annual meeting, Saskatoon, SK, May 2015.
- Karoyo, A. H., and Wilson, L.D. 2015. Structural Studies of Supramolecular Host-Guest Systems, U of S GIWS Symposium, Saskatoon, SK. (March 2015).
- Kim, J., and Chang, W. 2015. Evaluation of generalized microbial respiration equations for petroleum hydrocarbon-contaminated, cold-climate soils during bioremediation. 38th Arctic and Marine Oilspill Program (AMOP) Technical Seminar on Environmental Contamination and Response Conference Proceedings, Vancouver, BC, June 2-4, 2015.
- Koehler, B., Barbour S.L., and Ferguson, G. 2014. Evaluation of Density Dependence Convective Airflow Causing Accelerated Drying of Reclamation Soil Covers. 10th International Conference on Acid Rock Drainage (ICARD-IMWA2015), April 21-24, 2015, Santiago, Chile, Accepted December.
- Koehler, B. J., Barbour, S.L., and Ferguson, G. 2014. An Evaluation of Density Dependence Convective Airflow Causing Accelerated Drying of Reclamation Soil Covers. GeoRegina 2014, 67th Canadian Geotechnical Conference Proceedings, Sept.28-Oct.1.
- Kong, D., and Wilson, L.D. 2015. Modified biopolymers for recognition of oxoanion guests in water, 2015 U of S Graduate Students Symposium, Saskatoon. SK. (May 2015).
- Kulshreshtha, S. and Wheaton, E. 2015. Water Demand and Climate Extremes in Saskatchewan: Exploring Future Risks. Presentation at the Canadian Water Resources 2015 Conference, Winnipeg, MB.
- Kusch, J., Hunter, K., Vandergucht, D., and Hudson, J. 2015. Spatial and Temporal Trends in Phosphorus and Nitrogen in Lake Diefenbaker, Saskatchewan. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Kusch, J., Hunter, K., Vandergucht, D., and Hudson, J. 2015. The Effect of Temperature, Turbidity, and Depth on Spatial and Temporal Trends in Nitrogen and Phosphorous in Lake Diefenbaker, Saskatchewan. Prairie University Biological Symposium, February 19-21, Winnipeg, Canada.

- Kuzyk, T., Barbour, S.L., and Hendry, J. 2015. A Conceptual Model for Pore Water Release from Coal Waste Rock Piles in the Elk Valley, British Columbia, Canada. IAH – CNC 2015 Waterloo Conference, Waterloo, ON, 27-30 October, 2015.
- Kuzyk, T., Barbour, S.L. and Hendry, M.J. 2014. A Conceptual Model for the Flushing of Coal Waste Rock Piles in the Elk Valley, British Columbia, Canada. 2014 GSA Annual Meeting in Vancouver, British Columbia, Poster Presentation, Abstract only published (No. 249669) in GSA Abstracts with Programs Vol. 46, No. 6, Session 296-6: "T103. Mining and the Environment: Addressing Common Challenges Faced across the Mining Industry (Posters)", Oct. 22.
- Laroque, C.P, Davis, E., Mood, B.J. 2015. Forecasting radial growth in shelterbelt trees across southern Saskatchewan. Annual Meeting of the Canadian Association of Geographers. Vancouver, BC. June 1-6.
- Lemke, R., Bedard-Haughn, A., Gan, Y, and Baron, V. 2015. Canola cropping and carbon and nitrogen cycling on the Canadian prairies. Presentation to the International Workshop on Greenhouse Gas Emission from Oilseed Rape Cropping and Mitigation Options. Braunschweig, Germany.
- Lindenschmidt, K.-E., Kells, J., and Liu, N. 2015. Mapping Breakup Risk of River Ice Covers Impacted by Hydro-peaking Operations. Canadian Water Resources Association annual conference, 2-4 June, Winnipeg, Manitoba.
- Lindenschmidt, K.-E., and Das, A. 2015. Characterising river ice processes using geospatial modelling. Canadian Water Resources Association annual conference, 2-4 June, Winnipeg, Manitoba.
- Maavara, T., Hood, J., North, R., Doig, L., Parsons, C., Johansson, J., Liber, K., Hudson, J., Lucas, B., Vandergucht, D., and Van Cappellen, P. 2015. A long-term sink for nutrient silicon in Canada's most threatened river system. Joint Assembly of the Annual meeting of the American and Canadian Geophysical Unions. Montreal, Quebec. May 3-7.
- MacKinnon, B., Baulch, H., Sagin, J., Lindenschmidt, K., and Jardine, T. 2015. Influence of hydrological connectivity on winter limnology in floodplain lakes of the Saskatchewan River Delta, SK. Canadian Conferences for Fisheries Research, January.
- Mahaninia, M., and Wilson, L.D. 2015. Cross-Linked Chitosan Beads for Phosphate Anion Removal, 2015 Green Chemistry Applied in Industry - A Symposium by GCI at UofT, Toronto, ON. (May 2015).
- Mahaninia, M., and Wilson, L.D. 2015. Cross-Linked Chitosan Beads for Phosphate Anion Removal, 2015 U of S Graduate Students Symposium, Saskatoon. SK. (May 2015)
- Mahmood, F.N., Hendry, M.J., Barbour, S.L. and Klein, R. 2014. Origin and fate of nitrate derived from blasting in coal waste-rock spoils in British Columbia and Alberta, Canada. 2014 GSA Annual Meeting in Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 248788) in GSA Abstracts with Programs Vol. 46, No. 6, Session 279-5: " T103. Mining and the Environment: Addressing Common Challenges Faced across the Mining Industry", Oct. 22.

- Maillet, J., Laroque, C.P. 2015. From Annual to Intra-annual: exploring the radial growth-climate relationship with high resolution data. Annual Meeting of the Canadian Association of Geographers. Vancouver, BC. June 1-6.
- Maillet, J., Laroque, C.P. 2015. Watching Trees Grow: The use of intra-annual measures of radial-growth in dendroclimatological studies. Annual Meeting of the Canadian Society for Ecology and Evolution. Saskatoon, SK. May 21-25.
- Mamet, S.D., Singh, K.K., Chun, K.P., Brown, C.D., Bernard, J., and Johnstone, J.F. 2015. A sensitive slope at treeline: Do substrate and environmental characteristics determine tree sensitivity to climate? Canadian Society for Ecology and Evolution annual meeting, Saskatoon, SK, May 2015.
- Mamet, S.D., Singh, K.K., Brown, C.D., and Johnstone, J.F. 2015. Pattern and process in a multi-species treeline environment: cross-scale analysis of treeline dynamics within the Wolf Creek Research Basin, southwestern Yukon, Canada. American Association of Geographers annual meeting, Chicago, IL, April 2015.
- Masse, A., and Muscatello, J. 2015. Early life stage developmental effects of elevated maternal dietary selenium exposure in amphibians. Society of Environmental Toxicology and Chemistry (SETAC) Europe, Barcelona, Spain
- McLaughlin, K., and Bharadwaj, L. 2015. The risks to potable water trucked to cisterns in Beardy's Okemasis First Nation Saskatchewan Canadian Association of Geographers (CAG); Vancouver, BC – June.
- Meissner, A.G.N., Carr, M.K., Phillips, I.D., and Lindenschmidt, K.-E. 2015. Developing a geospatial model to distinguish riverine macroinvertebrate habitat. Canadian Water Resources Association annual conference, 2-4 June, Winnipeg, Manitoba.
- Michel, N.L., Clark, R.G., Hobson, K.A., and Morrissey, C.A. 2015. Where have all the grassland birds gone? Effects of land use, pesticides and climate on grassland birds in Canada's Prairie Potholes Region. Canadian Section of The Wildlife Society Annual General Meeting, Saskatoon, SK. 14 March.
- Michelson, C.I., Morrissey, C.A. and Clark, R.G. 2015. Effects of agricultural intensification on reproductive performance and nestling quality of tree swallows (*Tachycineta bicolor*) breeding in central Saskatchewan. Canadian Section of The Wildlife Society, Saskatoon, SK. 14 March.
- Michelson, C.I., Morrissey, C.A. and Clark, R.G. 2015. Dietary responses of tree swallows (*Tachycineta bicolor*) to agricultural intensification and implications on body condition. Canadian Society of Ecology and Evolution, Saskatoon, SK. 23 May.
- Morken, J.A., Conway, A.C., and Johnstone, J.F. 2015. The effects of fire severity and herbivory on the growth and succession of the boreal forest in interior Alaska. Canadian Society for Ecology and Evolution annual meeting, Saskatoon, SK, May 2015.
- Muldoon, B., and Hogan, N.S. 2015. Developing the brook stickleback (*Culaea inconstans*) as a bioindicator of exposure to endocrine disrupting compounds in aquatic environments. Prairie Northern Chapter of the Society of Environmental Toxicology and Chemistry Annual Meeting. June 4-5, Calgary, AB.

- Nesbitt, J.A., and Lindsay, M.B.J. 2015. Vanadium geochemistry of petroleum coke at an oil sands mine in northern Alberta, Canada. Canadian Light Source Annual Users' Meeting, May 4–6, Saskatoon, Canada.
- Norbury, V.M., Bishop, C.A., Jardine, T.D., Elliott, J., and Morrissey, C.A. 2015. Impacts of run-of-river dams on American dippers and the river food webs of coastal British Columbia. Canadian Section of the Wildlife Society Annual Conference, Saskatoon, SK. 14-15 March.
- Norbury, V.M., Bishop, C.A., Jardine, T.D., Elliott, J., and Morrissey, C.A. 2015. Impacts of run-of-river dams on American dippers and the river food webs of coastal British Columbia. Columbia Mountains Institute of Applied Science, Regulated Rivers Conference, Castlegar, BC. 6-7 May.
- North, R., Hunter, K., Johansson, J., Vandergucht, D., Dubourg, P., Abirhire, O., Ponomarenko, Y., Silsbe, G., Guildford, S., and Hudson, J. 2015. Nitrogen Transformations in a Large Dynamic Reservoir (Lake Diefenbaker, Saskatchewan). Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- O'Kane, M., Birkham, T., Goodbrand, A., Barbour, S.L., Carey, S.K., Straker, J., Baker, T., and Klein, R. 2015. Near-surface water balances of coal waste rock dumps. 10th International Conference on Acid Rock Drainage (ICARD-IMWA2015), paper 277, Chapter 3, April 21-24, 2015, Santiago, Chile.
- O'Kane, M., Barbour, S.L., Meiers, G., and McDonnell, J. 2014. Practical Considerations when Designing for Geosynthetics in a Cover System. Geosynthetics Mining Solutions 2014 conference, Sept.8-11, Vancouver.
- Oldach, M., Helps, D., Prestie, C., and Hudson, J. 2015. Effect of Metals on the Allometry of Planktonic Food Webs in Lakes Exposed to Mining Operations in Northern Saskatchewan. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Pomedli, M., Belosowsky, T., Hunter, K., and Hudson, J.J. 2015. Comparison Between Water Column and Sediment Trap Nutrient Stoichiometry in Lake Diefenbaker, SK. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Pomeroy, J., Fang, X., Shook, K., and Westbrook, C. 2015. Modelling the impact of depressional storage drainage on the hydrology of a Canadian Prairie basin. AGU-CGU Joint Congress, May, Montreal, Canada.
- Ponomarenko, Y., Hunter, K., Abirhire, O., and Hudson, J. 2015. Photoammonification in Plains and Boreal Shield Lakes with an Expanded Dataset. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Prestie, C., Sereda, J., and Hudson, J. 2015. Assimilation of Aquaculture Waste by Lake Whitefish in Lake Diefenbaker, Saskatchewan. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Prepas, E., McEachern, P., Germida, J., Van Rees, K. C. J., Putz, G., Lanoo, M., Chen, H., and Pyle, G. 2015. FORWARD III: Watershed research and modelling to contribute to cumulative effects management in the Canadian Boreal Forest COSIA Meeting Calgary.

- Razavi, S., and Gupta, H.V. 2015. A Critical Look at Sensitivity Analysis of Hydrologic Systems Models, American Geophysical Union-Canadian Geophysical Union (CGU-CGU) Joint Assembly, May 3-7, Montreal, QC.
- Razavi, S., Elshorbagy, A., Wheeler, H., and Sauchyn, D. 2015. Evaluation of Paleo-Hydrologic Extremes and Their Uncertainties, American Geophysical Union-Canadian Geophysical Union (CGU-CGU) Joint Assembly, May 3-7, Montreal, QC.
- Razavi, S., and Gupta, H.V. 2015. A New Framework for Effective and Efficient Global Sensitivity Analysis of Earth and Environmental Systems Models, European Geosciences Union (EGU) General Assembly, April 12-17, Vienna, Austria.
- Ross, J., and Strickert, G.E. 2015. Perspectives on Equitable Water Resources Allocation from a Decision Experiment. 21st International Symposium on Society and Resource Management, Charleston, SC, USA, June 17.
- Sagin, J., and Lindenschmidt, K.-E. 2015. Digital Terrain Model (DTM) of the Slave River and Delta, NWT, Canada. CGU-AGU Joint Assembly, 3-7 May, Montreal, Canada. <https://agu.confex.com/agu/ja2015/meetingapp.cgi#Paper/36111>
- Schabert, M., Hendry, J., and Barbour, S.L. 2015. Application of Push-Pull Tests to Define Biogeochemical Controls on Selenium and Nitrate Attenuation in Saturated Coal Waste Rock. In Session: 'Innovation in the remediation of contaminated sites', IAH – CNC 2015 Waterloo Conference, Waterloo, ON, 27-30 October, 2015.
- Schmeling, E., Hendry, M.J. and Barbour, S.L. 2014. Application of 1-D Vertical Profiles of $\delta^2\text{H}$ and Cl to evaluate Vertical Leakage through a Fractured Cretaceous Aquitard at a Proposed Mine Dewatering Site, Fort à la Corne, Saskatchewan, Canada. 2014 GSA Annual Meeting, Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 249354) in GSA Abstracts with Programs Vol. 46, No. 6, Session 161-12: "T161 (Hendry, Barbour): Application of Isotopes of Water to Characterize Hydrogeological Processes in Mine Environments", Oct. 20.
- Shafiei, F., Hunter, K., Johansson, J., Vandergucht, D., and Hudson, J. 2015. Nitrogen and Phosphorus Loads and Nutrient Limitation in Lake Diefenbaker. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.
- Singh, K.K., Henkelman, J., and Johnstone, J.F. 2015. Implications of high-resolution remote sensing data and landscape characteristics for large area boreal forest vegetation assessment. Canadian Society for Ecology and Evolution annual meeting, Saskatoon, SK, May 2015.
- Smith, L.A., Barbour, S.L., and Hendry, J. 2015. Determining in situ properties of claystone aquitards using pore pressure responses from grouted-in pressure transducers. Geoconvention 2015, Geoscience New Horizons, in: 'Physical Properties of Rock' Session, May 4-8, 2015, Calgary.
- Smith, L., Hendry, M.J., Barbour, S.L. and Van der Kamp, G. 2014. Determining In Situ Properties of Caprock Formations using Pore Pressure Responses from Grouted-In Pressure Transducers. 2014 GSA Annual Meeting in Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 246940) in GSA Abstracts with Programs Vol. 46, No. 6, Session

- 339-5: " T160. (Osborn, Ryan): Enviro. Effects of Oil and Gas Development on Water Quality: Toward Sustainability and Stewardship", Oct. 22.
- Stanton, R., Clark, R.G., and Morrissey, C.A. 2015. Agricultural landscapes influence tree swallow (*Tachycineta bicolor*) foraging strategy and return rates, but not adult body condition. Canadian Society of Ecology and Evolution (CSEE). Saskatoon, SK. 22 May.
- Stanton, R., Clark, R.G., and Morrissey, C.A. 2015. Agricultural landscapes influence tree swallow (*Tachycineta bicolor*) foraging strategy, adult body condition, and return rates. Canadian Section of the Wildlife Society (TWS). Saskatoon, SK. 14 March.
- Straker J., Baker, T., O’Kane M., Shurniak, R., Barbour, S.L., and Carey S. 2015. Ecosystem reconstruction – a global assessment of methods for estimating soil water regimes for mine reclamation and closure. Mine Closure 2015 - 10th International Conf. on Mine Closure, June 1-3, 2015, Vancouver, BC, Proceedings: Chapter 11: Ecosystem Reconstruction, pp.1035-1046.
- Straker J., Baker, T., Barbour, S.L., O’Kane M., Carey S., and Charest D. 2015. Mine reclamation and surface water balances: an ecohydrologic classification system for mine-affected watersheds. Mine Closure 2015 - 10th International Conf. on Mine Closure, June 1-3, 2015, Vancouver, BC, Proceedings: Chapter 11: Ecosystem Reconstruction, pp.1023-1034.
- Straker J., O’Kane M., Carey S., Charest D., and Barbour, S.L. 2015. Mine water management for closure – mine reclamation and surface water balances. 10th International Conference on Acid Rock Drainage (ICARD-IMWA2015), paper 115, Chapter 14, April 21-24, 2015, Santiago, Chile.
- Strickert, G.E., Ross, J., Bradford, L.E., and Gober, P. 2015. The Effects of Policy on Water Allocation: Results from a Decision Experiment. 68th National Canada Water Resources Association Conference Policy, Planning and Management, June 2.
- Szmigielski, J., Hendry, M.J and Barbour, S.L. 2014. Hydrogeological Characterization of a Groundwater System Downgradient of a Coal Waste Rock Spoil. 2014 GSA Annual Meeting in Vancouver, British Columbia, Poster Presentation, Abstract only published (No. 249013) in GSA Abstracts with Programs Vol. 46, No. 6, Session 296-8: "T103. Mining and the Environment: Addressing Common Challenges Faced across the Mining Industry (Posters) ", Oct. 22.
- Thomas, J., Masse, A., and Muscatello, J. 2015. Selenium ecotoxicology in fish and frogs. Canadian Society of Zoologists, Calgary, Canada
- Tipman, J., Barbour, S.L., and van der Kamp, G. 2015. Calibration of Geolysimeters to Track Short-term Soil Vegetation Atmosphere Transfers. GeoQuebec 2015, Canadian Geotechnical Conference, Quebec City, Sept. 20-23.
- Udoetok, I.A., Wilson, L.D., and Headley, J.V. 2015. Structure and adsorption Properties of Cross-linked Cellulose-Epichlorohydrin Polymers in Aqueous Solution, GIWS Symposium, Saskatoon, SK. (March 2015).
- Udoetok, I.A., Wilson, L.D., and Headley, J.V. 2015. Structure and adsorption Properties of Cross-linked Cellulose-Epichlorohydrin Polymers in Aqueous Solution, 98th CSC Conference, Ottawa, ON. (June 2015)

- Udoetok, I.A., Wilson, L.D., and Headley, J.V. 2015. Fractionation of Carboxylate Anions from Aqueous Solution Using Chitosan Cross-Linked Sorbent Materials, 98th CSC Conference, Ottawa, ON. (June 2015)
- Walker, X.W. and Johnstone, J.F. 2015. Drought stress in northern boreal forests signals decreased resilience to fire. Canadian Society for Ecology and Evolution annual meeting, Saskatoon, SK, May 2015.
- Wang, X., Westbrook, C., Helgason, B., and Bedard-Haughn, A. 2015. Assessing pedogenic controls vs. relative depth on carbon mineralization, organic matter composition and microbial community in a mountain peatland. Canadian Soil Science Society Meeting.
- Westbrook, C.J., and Bedard-Haughn, A. 2015. Alberta's 2013 flood: Response of a mountain peatland. AGU-CGU Joint Congress May, Montreal, Canada. This paper resulted in a press release in Science News
- Yassin, F.A., Wheeler, H.S., Razavi, S., Azuri, G.S., Davison, B., and Pietroniro, A. 2015. Comprehensive, Process-based Identification of Hydrologic Models using Satellite and In-situ Water Storage Data: A Multi-objective Calibration Approach. European Geosciences Union (EGU) General Assembly, April 12-17, Vienna, Austria.
- Yip, H., and Hudson, J. 2015. Lake Diefenbaker from Above, Long Term Patterns in Water Quality as Determined By Satellite Imagery. Annual Meeting of the Society of Canadian Limnologists, January 8-11, Ottawa, Canada.

Conference Proceedings and Presentations - 2014

- Amadi, C., Farrell, R. and Van Rees, K. 2014. Comparative measurements of soil organic carbon content and greenhouse gas fluxes in nine shelterbelt and crop field soils. Soil Science Society of America Annual Meeting, Long Beach CA, USA. November.
- Amadi, C., Farrell, R. and Van Rees, K. 2014. Mature Caragana shelterbelts on Prairie soils: are they environmental assets? Poster presentation, Soil Science Society of America Annual Meeting, Long Beach CA, USA. November.
- Beitel, S., Doering, J., Patterson, S., Eisner, B., and Hecker, M. 2014. In vitro Assessment of the Disruption of Steroidogenesis in Three North American Fish Species. 41st Aquatic Toxicity Workshop in Ottawa, ON, Canada. Sep 28 – Oct 1.
- Bharadwaj, L. 2014. Community-Based Participatory Research: An approach to Sustainable Water Supplies in First Nations Communities. October 27-29, 2014 Partners FOR Saskatchewan River Basin and Canadian Water Resources Association's. "Long Term Threats to the Saskatchewan River Basin." Delta Bessborough Hotel, Saskatoon, Sk.
- Bharadwaj, L., Johnston, P., Zagosewski, R., and Waldner, C. 2014. First Nations Safe Drinking Water Program: Ensuring the Health of First Nations Children, Youth and Families (2008-2015 Progress). Federation of Saskatchewan Indian Nations Environmental Working Group September 10, 2014 Best Western, Saskatoon, SK.

- Bianchini, K. and Morrissey, C.A. 2014. The initiation and regulation of avian migratory fat deposition and how contamination affects pre-migratory fuelling in shorebirds. SETAC North America 35th Annual Meeting, Vancouver, BC. 12 November, 2014.
- Cavallaro, M., Peru, K., Headley, J., Morrissey, C., and Liber, K. 2014. Biodiversity and Pesticides: Effects of Chronic Neonicotinoid Insecticide Exposure on Aquatic Insect Emergence in Prairie Wetlands. The Society of Environmental Toxicology and Chemistry. Vancouver, BC. November.
- Cavallaro, M., Phillips, I., Headley, J., Peru, K., Morrissey, C., and Liber, K. 2014. Investigating the Impacts of Neonicotinoid Insecticides on Macroinvertebrate Communities in Limnocorrals in a Prairie Pond. Joint Entomological Meeting of the Canadian Entomological Society. Saskatoon, SK. October.
- Cavallaro, M.C., Morrissey, C., Headley, J., Peru, K., and Liber, K. 2014. Effects of Chronic Neonicotinoid Insecticide Exposure on Aquatic Insect Emergence in Prairie Wetlands. The Society of Environmental Toxicology and Chemistry: Prairie Northern Chapter. Saskatoon, SK. June.
- Cruz-Hernández, P., Lindsay, M.B.J., Parviainen, A., Pérez-López, R., and Nieto, J.M. 2014. Arsenic mobilization in iron precipitates from Acid Mine Drainages at different time-scales. Proceedings of the XXXIV Reunión Científica de la Sociedad Española de Mineralogía, July 2–7, Granada, Spain.
- Das, S., Hendry, J. and Lindsay, M.B.J. 2014. Laboratory evaluation of selenium treatment using zero-valent iron (ZVI) under oxic conditions. GSA Annual Meeting, October 19–22, Vancouver, Canada.
- David, C., Farrell, R., and Helgason, W. 2014. The influence of irrigated crop management on soil greenhouse gas fluxes: A Saskatchewan example. Proceedings of Soils and Crops 2014 Workshop, March 11-12, Saskatoon, SK.
- David, C., Lemke, R., Wahab, J., Helgason, W., and Farrell, R. 2014. The effect of fall nitrogen and cropping sequence on GHG emissions under irrigation. Canadian Geophysical Union Annual meeting, Banff, Alberta, May 4-7.
- David, C., Helgason, W., and Farrell, R. 2014. Irrigation induced changes in seasonal soil conditions and resulting greenhouse gas dynamics. Canadian Geophysical Union Annual meeting, Banff, Alberta, May 4-7.
- Dhillon, G. S., and Van Rees, K. C. J. 2014. Carbon sequestration potential of the shelterbelt agroforestry systems. Soil Science Society of America Annual Meeting, Long Beach CA, USA. November.
- Dhillon, G. S., Peak, D., and Van Rees, K. C. J. 2014. Prediction of soil organic carbon (SOC) concentration using ATR-FTIR for shelterbelts and agricultural fields in Saskatchewan. Soil Science Society of America Annual Meeting, Long Beach CA, USA. November.
- Ferdous, J., Helgason, W., and David, C. 2014. The effect of irrigation upon surface energy flux, soil environment, and greenhouse gas emissions. Canadian Geophysical Union Annual meeting, Banff, Alberta, May 4-7.

- Ford, L. and Bharadwaj, L. 2014. Groundwater Consumption in Rural Communities Impact of Risk Perception on Human Health. 7th International Symposium: Safety & Health in Agricultural & Rural Populations, in Saskatoon, October 19-22.
- Giesy, J.P. 2014. Health Status of Fishes from the Athabasca and Slave River System, Northern Canada, With P. Jones, A. Hill, B.J. Tendler, E. Ohiozebau, E. Kelly, J. Fresque- Baxter. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13,.
- Giesy, J.P. 2014. Pursuing the Chemical Culprits: What Organic Compounds are Responsible for Toxicity of Oil Sands Process- Affected Water? With: S.B. Wiseman, A. dos Santos Pereira, G. Morandi, R. Mankidy, Z. Kun, N. Zetouni, E.K. Asiedu, J.W. Martin. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. The Presence of Polycyclic Aromatic Hydrocarbons in edible fish tissue from the Athabasca/Slave river system, Canada, With: E. Ohiozebau, B. Tendler, A. Hill, G. Codling, E. Kelly, P. Jones. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Functionality of aryl hydrocarbon receptors (AhR1 and AhR2) of white sturgeon and implications for the risk assessment of dioxin-like compounds, With: J. Doering, R. Farmahin, S.B. Wiseman, S.W. Kennedy, M. Hecker. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Mixtures of Two Novel Brominated Flame Retardants Affect Fecundity and Transcript Profiles of the HPGL-Axis in Japanese Medaka, With: D.M. Saunders, M. Podaima, G. Codling, S. Wiseman. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Assessment of PAHs and PCBs in sediment in aquatic systems in Durban, South Africa, using chemical and biological analysis, With: N.L. Vogt, R. Pieters, B. Newman. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Assessing biological effects of municipal wastewater effluent using the fathead minnow reproductive bioassay, With: K. Steeves, S. Hanson, T. Bagatim, S.B. Wiseman, P.D. Jones, M. Hecker, A. Hontela, N. Hogan. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Assessing potential endocrine disrupting effects of municipal effluents on fathead minnow (*Pimephales promelas*) populations in Southern Saskatchewan, With S. Hanson, T. Bagatim, K. Steeves, S.B. Wiseman, N. Hogan, A. Hontela, P.D. Jones, M. Hecker. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Bioassay-directed characterization of endocrine-disrupting potencies of municipal effluents in Canada, With: T. Bagatim, S. Hanson, K. Steeves, S.B. Wiseman, N. Hogan, P.D. Jones, M. Hecker. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.

- Giesy, J.P. 2014. Reconstructing long-term limnological trends in phytoplankton and toxin production using paleogenomics and next generation sequencing. With T. Tse, A. Hill, S. Wiseman, M. Hecker, L.E. Doig, H. Wheeler, P.D. Jones. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Teratogenic Retinoic Acids in Aqueous Environment, With: J. Hu, X. Wu, J. Jinag, Y. Wan. To Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Chemical Profile of Swift Current Wastewater Treatment Plant Discharge and Its Potential Effects.” With: H. Yuan, G. Codling, H. Wheeler, M. Hecker, P.D. Jones. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Species-specific bioaccumulation of perfluoroalkyl acids (PFAAs) in intertidal organisms of the west coast of South Korea, with J. Khim, S. Hong, T. Wang, J.E. Naile, J. Park, B. Kwon, S. Song, J. Ryu, G. Codling, P.D. Jones, Y. Lu. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Assessing the mechanistic toxicity of oil sands process affected waters (OSPW) using a genome wide live cell array reporter system, with: G. Morandi, H. Al Harbi, R. Mankidy, A. dos Santos Pereira, J. Martin, S. Wiseman. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Is oxidative stress a mechanism of toxicity of oil sands process affected water? With: S.B. Wiseman, Y. He, G. Morandi, R. Mankidy, H. Al Harbi, A. dos Santos Pereira, J.W. Martin. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13, 2014.
- Giesy, J.P. 2014. Inhibition of multi-xenobiotic resistance (MXR/MDR) efflux activity as a potential mechanism of toxicity of oil sands process affected water, with: H. Al Harbi, D.M. Saunders, J.W. Martin, A. dos Santos Pereira, S.B. Wiseman. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Reporter gene screening for endocrine disruptive compounds in the aquatic environment of a South African game reserve downstream of a DDT sprayed area, With: R. Pieters, M. Delport, M. Hannam, S. Prinsloo, V. Wepener, N.J. Smit, Y. Ikenaka, M. Ishizuka. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Organophosphorous pesticides in honey, pollen and bees (*Apis mellifera* L.) and their potential hazard to bee colonies in Egypt, with: Y. Al. Naggar, A. Vogt, G. Codling, E. Naem, M. Mona, A. Saif. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Effect-directed analysis and mixture effects of AhR-active compounds in crude oil and oil-contaminated sediments, with: S. Hong, J. Khim, S. Lee, K. Choi, G. Kim, S. Ha, U. Kim, W. Shim, J. Jung. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.

- Giesy, J.P. 2014. Mixed Halogenated Carbazole Identification and Spatial Distribution and Temporal Trend in the Sediments of Upper Great Lakes, with: J. Guo, D. Chen, A. Li, Z. Li, P.A. Padiara, K. Rockne, N. Sturchio, D. Potter, R. Yang. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Chemodynamic behavior of Thallium in the Slave River, Northwest Territories, Canada, with: B.J. Tendler, A. Hill, E. Ohiozebau, E. Kelly, J. Fresque-Baxter, P.D. Jones. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Two Highly Brominated Flame Retardants Are Photolytically Degraded to Biologically Active By-Products: Cytotoxic Effect and mRNA Expression in CEH, with: G. Su, R.J. Letcher, D. Crump, R. Farmahin, S.W. Kennedy. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Giesy, J.P. 2014. Legacy and Emerging Halogenated Organic Compounds in the Surface Sediments of Lake Huron, with: Z. Li, P. Ranasinghe, J. Guo, A. Li, K.J. Rockne, J.P. Giesy, and N. C. Sturchio. To: Society of Environmental Toxicology and Chemistry, 35th Annual meeting, Vancouver, BC, Canada, November 9-13.
- Gonda, J., Elshorbagy, A., Wheeler, H. and Razavi, S. 2014. Scale vs. Complexity: A Multi Scale Water Resources Model. The 2014 AGU Fall Meeting, San Francisco, USA, December 15-19 (Poster presentation).
- Helgason, W. 2014. Factors influencing snow surface heat exchange and surface temperature dynamics. Canadian Geophysical Union Annual meeting, Banff, Alberta, May 4-7.
- Kehoe, M., and Baulch, H. 2014 Seasonal and decadal dynamics in long term algal and limnological data set. Global Lakes Ecological Observatory Network Meeting. Quebec.
- Kim, J., and Chang, W. 2014. Site remediation in northern climates: microbial respiration models for petroleum hydrocarbon-contaminated soils at low temperatures. 67th Canadian Geotechnical Conference Proceedings (CD-ROM), GeoRegina 2014, Regina, SK. Sept. 28-Oct. 1, 2014.
- Koehler, B., Barbour, S.L., and Ferguson, G. 2014. An Evaluation of Density Dependant Convective Airflow Causing Accelerated Drying of Reclamation Soil Covers. 67th Canadian Geotechnical Conference.
- Liu, Q., Mohamed, M.H., and Wilson, L.D. 2014. Kinetic Uptake Studies of Powdered Materials in Solution", U of S Chemistry Research and Awards Day, Saskatoon, SK. (September 2014).
- Helgason, B.L., VandenBygaart, A.J., Konshuh, H.J., Bedard-Haughn, A., Gillespie, A.W. and Gregorich, E.G. 2014. Erosion and burial of C in croplands: Is it biologically available? Sixth International Workshop on Soil and Sedimentary Organic Matter Stabilization and Destabilization (SOM6), Kiawah Island, SC.
- Mack, M.C., Alexander, H.D., Melvin, A.M., Jean, M., and Johnstone, J.F. 2014. Plant functional traits reinforce alternate successional trajectories in Alaskan boreal forest. Ecological Society of America annual meeting, Sacramento, CA, August 2014.

- Main, A.R., Michel, N.L., Headley, J.V., Peru, K.M., Cessna, A.J. and Morrissey, C.A. 2014. Drivers of neonicotinoid fate and persistence in Prairie wetlands. SETAC, North America, Vancouver, BC, November 9-13.
- Melvin, A.C., Mack, M.C., Johnstone, J.F., Schuur, E.A.G., Genet, H., and McGuire, A. D. 2014. Tree species linked to large differences in ecosystem carbon distribution in Alaskan boreal forest. American Geophysical Union annual fall meeting, San Francisco, CA, December 2014.
- Millette, V., Marleau, N., Ansdell, K., and Laroque, C.P. 2014. Basalt Composition at an old mine site in Saskatchewan: Is there a link with Soil Composition and Tree Growth? Annual Saskatchewan Geological Survey Open House, December 2014, Saskatoon SK.
- Masse, A., and Muscatello, J. 2014. Establishing dose-dependent developmental effects of maternal dietary selenium in the model amphibian species *Xenopus laevis*. Society of Environmental Toxicology and Chemistry, Vancouver, Canada
- Mclaughlin, K., and Bharadwaj, L. 2014. Community-based participatory research to address cistern drinking water quality: experiences from Beardy's Okemasis First Nation, Saskatchewan. Indigenous Health Conference; Toronto, ON – November 2014 Challenging Health Inequities Indigenous Health Conference November 20-21, 2014 | University of Toronto Conference Centre
- Mclaughlin, K., and Bharadwaj, L. 2014. Trucked to Cistern Water Supply: What are the Risks? 7th International Symposium: Safety & Health in Agricultural & Rural Populations: Global Perspectives (SHARP); Saskatoon, SK – October 2014
- Mclaughlin, K., and Bharadwaj, L. 2014. Risks to the Trucked to Cistern Water Supply in a Saskatchewan First Nation Community Prairie Association of Geographers Conference (PCAG); Riding Mountain National Park, MB – September 2014.
- Michel, N.L., Clark, R.G., Hobson, K.A., and Morrissey, C.A. 2014. Population dynamics of aerial insectivorous birds: overview and climatic drivers. Joint meeting of American Ornithologists' Union, Cooper Ornithological Society, and Society of Canadian Ornithologists, Estes Park, CO. 24 September.
- Michel, N.L., Clark, R.G., Hobson, K.A., and Morrissey, C.A. 2014. Aerial insectivorous bird declines: When? Where? Why? WildEcol seminar series, University of Saskatchewan and Environment Canada, Saskatoon, SK. 22 October.
- Michelson, C.I., Clark, R.G. and Morrissey, C.A. 2014. Agricultural intensification does not disrupt the picky eating habits of tree swallows (*Tachycineta bicolor*). Joint meeting of the American Ornithologists' Union, Copper Ornithological Society, and Society of Canadian Ornithologists, Estes Park, CO. 24 Sept.
- Michelson, C.I., Morrissey, C.A., Stanton, R.L., and Clark, R.G. 2014. Effects of agricultural intensification on tree swallow (*Tachycineta bicolor*) reproduction and nestling body condition. Joint meeting of the American Ornithologists' Union, Copper Ornithological Society, and Society of Canadian Ornithologists, Estes Park, CO. 26 Sept.
- Muldoon, B., and Hogan, N.S. 2014. A novel method for the assessment of androgenic and estrogenic compounds using the brook stickleback (*Culaea inconstans*). North American

- Society of Environmental Toxicology and Chemistry Annual Meeting. November 9-13, Vancouver, BC.
- Nazemi, A., Alam, S., and Elshorbagy, A. 2014. Uncertainties in Future Projections of Extreme Rainfall at Fine Scales: The Role of Various Sources. The 11th International Conference on Hydroinformatics, New York City, USA, August 17-21, 4 pp.
- North, R., Baulch, H., and Lindenschmidt, K.-E. 2014. Winter Limnology Studies of Prairie Reservoirs. Lake assessments sessions presented at: NALMS 34th International Symposium, November 11-14, Tampa, Florida.
- Nuesser L., Brack W., Patterson S., Wiseman S., Seiler T.B., M. Hecker, Hollert H. 2014. Assessment of the toxicogenomic potential of complex industrial wastewater effluents in zebrafish using RNA sequence-by-synthesis technology and qPCR. SETAC North America 35th Annual Meeting, Nov 9-13, Vancouver, Canada.
- Patrick, R. 2014. Prairie Division Canadian Association of Geographers, September, Elkhorn Lodge, MB.
- Patterson, S., Zee, J., Wiseman, S., and Hecker, M. 2014. Effects of Chronic Dietary Selenomethionine Exposure on the Physiological Stress Response in Juvenile White Sturgeon (*Acipenser transmontanus*). SETAC North America 35th Annual Meeting, Nov 9-13, Vancouver, Canada.
- Pernica, P., North, R., and Baulch, H. 2014. A method to estimate mixing depth under ice in mid-latitude lakes. Global Lakes Ecological Observatory Network Meeting. Quebec.
- Pomeroy, J., Dumanski, S., Shook, K., and Westbrook, C. 2014. Changes to prairie flooding and implications for the Saskatchewan River Basin. Saskatchewan River Threat conference, October 28, Regina, SK.
- Razavi, S., Elshorbagy, A., Wheeler, H. and Sauchyn, D. 2014. Reconstruction of Paleo-hydrologic Data for Vulnerability Assessment of Water Resources Systems. The 11th International Conference on Hydroinformatics, New York City, USA, August 17-21, 4 pp. (paper 1378 & Oral presentation).
- Pratt, D.L., Hendry, M.J., Barbour, S.L. and Schmeling, E. 2014. Optimization and Configuration of a Hydrocarbon Gas Removal System for the Determination of $\delta^2\text{H}$ and $\delta^{18}\text{O}$ on Picarro CRDS. 2014 GSA Annual Meeting, Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 246284) in GSA Abstracts with Programs Vol. 46, No. 6, Session 161-2: "T161 (Hendry, Barbour): Application of Isotopes of Water to Characterize Hydrogeological Processes in Mine Environments", Oct. 20.
- Qin, G., Tang, S., Beitel, S., Doering, J., Liu, H., Wang, M., Du, H. and Hecker, M. 2014. Impact of predator cues on responses to silver nanoparticles in *Daphnia carinata*. SETAC North America 35th Annual Meeting, Nov 9-13, Vancouver, Canada.
- Razavi, S., and Gupta, H.V. 2014. What Do We Mean By Sensitivity Analysis? The Need For A Comprehensive Characterization Of Sensitivity In Earth System Models, American Geophysical Union (AGU) Meeting, December 15-19, San Francisco, CA.

- Ryan, A., Santore, R., Vardy, D., and Hecker, M. 2014. Evaluating the likelihood that early life stages of white sturgeon were affected by metals in sediment exposures. SETAC North America 35th Annual Meeting, Nov 9-13, Vancouver, Canada.
- Sadeghian, A., Hudson, J., Wheeler, H., and Lindenschmidt, K.-E. 2014. Lake Diefenbaker Hydrodynamic Model. Lake assessments sessions presented at: NALMS 34th International Symposium, November 11-14, Tampa, Florida.
- Sadeghian, A., Hudson, J., Wheeler, H., and Lindenschmidt, K.-E. 2014. Lake Diefenbaker Hydrodynamic Model. Poster sessions presented at: NALMS 34th International Symposium, November 11-14, Tampa, Florida.
- Sagin, J., Dussion, R., Zagozewski, R., and Bharadwaj, L. 2014. Landfill a Risk Hazard in Cumberland House Reserve and Village of Cumberland House. 11th Annual Canadian Risk and Hazards Network Symposium, Eaton Chelsea, Toronto October 22-24.
- Smith, L.A., Hendry, M.J., and van der Kamp, G. 2014. A new technique for determining in situ parameters of argillaceous deposits using pore pressure responses. GeoConvention 2014: FOCUS. Calgary, Alberta, Canada, May 12-14.
- Stanton, R., Clark, R.G., and Morrissey, C.A. 2014. Indirect effects of agricultural intensification and pesticides on tree swallow (*Tachycineta bicolor*) foraging, body condition and stress physiology. 2014. Society of Environmental Toxicology and Chemistry (SETAC). Vancouver, BC.
- Stanton, R., Clark, R.G., and Morrissey, C.A. 2014. Indirect effects of agricultural intensification on components of tree swallow (*Tachycineta bicolor*) stress physiology. 2014. AOU/COS/SCO Joint Meeting. Estes Park, CO. 27 September.
- Stanton, R., Clark, R.G., and Morrissey, C.A. 2014. Indirect effects of agricultural intensification on tree swallow (*Tachycineta bicolor*) foraging and dispersal behaviours. AOU/COS/SCO Joint Meeting, Estes Park, CO. 25 September.
- Steeves, J., Barbour, S.L., Ferguson, G., and Carey, S. 2014. The role of forced convection in thawing a sloped frozen layer. 67th Canadian Geotechnical Conference.
- Steeves, J., Barbour, S.L., and Ferguson, G. 2014. The role of forced convection in thawing a sloped frozen layer. GeoRegina 2014, 67th Canadian Geotechnical Conference Proceedings, Sept.28-Oct.1.
- Terry, J. A., Baulch, H. M., Bauer, J., Sagin, J., and Lindenschmidt, K.-E. 2014. Whole lake modelling to understand complex processes. Global Lakes Ecological Observatory Network Meeting. Quebec.
- Thomas, J. (2014). Mechanisms of developmental toxicity in zebrafish exposed to selenium. International Congress on the Biology of Fish, Edinburgh, United Kingdom
- Walker, X.J., Mack, M.C., and Johnstone, J.F. 2014. Radial growth and $\delta^{13}\text{C}$ responses of black spruce to climate. Ecological Society of America annual meeting, Sacramento, CA, August 2014.
- Westbrook, C.J., Morrison, A., Wang, X., and Bedard-Haughn, A. 2014. Subsurface complexity of Rocky Mountain peatlands regulates carbon and nitrogen dynamics. American Geophysical Union Annual Meeting, San Francisco, CA.

- Villeneuve, D., Crump, D., Garcia-Reyero, N., Hecker, M., Hutchinson, T., Lalone, C., Landesmann, B., Lettieri, T., Munn, S., Nepelska, M., Ottinger, M., Vergauwen, L., and Whelan, M. 2014. Adverse Outcome Pathway (AOP) Development: Guiding Principles and Best Practices. SETAC North America 35th Annual Meeting, Nov 9-13, Vancouver, Canada.
- Zee, J., Patterson, S., Wiseman, S., Gagnon, D., and Hecker, M. 2014. Is Oxidative Stress the Main Driver of Selenium Toxicity in Juvenile White Sturgeon (*Acipenser transmontanus*). SETAC North America 35th Annual Meeting, Nov 9-13, Vancouver, Canada.
- Zheng X., Tang S., Liu H., Hecker, M., and Wiseman, S. 2014. Effects of 6-OH-BDE-47, 6-MeO-BDE-47 and BDE-47 on receptor-associated mRNA expression in zebrafish embryos/larvae. SETAC North America 35th Annual Meeting, Nov 9-13, Vancouver, Canada.
- Zuniga-Benitez, H., Soltan, J., and Penuela, G. 2014. Effect of sonication operating parameters on Benzophenone-3 degradation, The 20th International Conference on Advanced Oxidation Technologies for Treatment of Water, Air and Soil (AOTs -20), San Diego, California, November 17-20.

Books and Book Chapters - 2015

- Giesy, J.P. and Jones, P.D. 2015. Perfluorinated Substances in the Environment: History of an Environmental Issue. Pp. 74-78 In: Newman, M.C. Fundamental of Ecotoxicology: The Science of Pollution, 4th Ed. CRC Press, Boca Raton, FL. 654 p.
- Gober, P., and Quay, R. 2014. Harnessing urban water demand: The challenges ahead. In Handbook on Urbanization and Global Environmental Change, eds., K.C. Seto and W. Solecki. Taylor & Francis, forthcoming.

Books and Book Chapters - 2014

- Janz D. 2014. Dithiocarbamates. Wexler P. Encyclopedia of Toxicology. 3rd edition: 212-214.
- Janz D. 2014. Chlorobenzilate. Wexler P. Encyclopedia of Toxicology. 3rd edition: 874-875.
- Janz D. 2014. Hexachlorobutadiene. Wexler P. Encyclopedia of Toxicology. 3rd edition: 872-873.
- Janz D. 2014. Dinitrophenols. Wexler P. Encyclopedia of Toxicology. 3rd edition: 177-178.
- Pomeroy, J.W. 2014. October 13: John Pomeroy. Global Chorus: 365 Voices on the Future of the Planet, Rocky Mountain Books: 318-318.
- Sauchyn, D., Bonsal, B., Kienzle, S., St Jacques, J., Vanstone, J., and Wheaton, E. 2014. Adaptation according to Mode of Climate Variability: A Case Study from Canada's Western Interior. Pp. 1-24 Chapter in Leal Filho, W(ed) Handbook of Climate Change Adaptation. Springer-Verlag, Berlin, Heidelberg, DOI: 10.1007/978-3-642-40455-9_93-1. Available at http://link.springer.com/referenceworkentry/10.1007/978-3-642-40455-9_93-1
- Wheater, H.S., and Gober, P. 2014. Meeting the Science Challenges of Water Security in the Saskatchewan River Basin: a Regional Hydroclimate Project from Western Canada. In Proceedings of the Dooge-Nash International Symposium, Dublin, April 23-24.

Plenary, Key Note and Invited Lectures - 2015

- Barbour, S.L. 2015. Evaluation of Soil Atmosphere Vegetation Transfers (SVAT) for mine closure applications. Presentation at Technical Meeting for N.Ireland Geotechnical Group (NIGG), Institution of Civil Engineers (ICE), QUB, N.Ireland, May 8, 2015.
- Barbour, S.L. 2015. On joint research, with D. Hughes and grad students at QUB, N.Ireland, **May 7, 2015.**
- Barbour, S.L. 2015. Invited talks for UK: Geotechnical modeling using SLOPE/W, SEEP/W, SIGMA/W. GeoSlope International Geotechnical Modeling Workshop (May 5-6, 2015, London).
- Barbour, S.L. 2015. EPSRC (UK) funded multi-university research study (ISMART, <http://www.ismartproject.org/project/community.html>). This group (Hughes, Briggs, etc) is attempting to link SW/GW models to geotechnical infrastructure, QUB, N.Ireland, May 4, 2015.
- Bedard-Haughn, A., Pennock, D., and Helgason, B. 2015. What lies beneath: Carbon in wetland and buried soils. Grassland Carbon Workshop, University of Alberta, Edmonton, AB.
- Bedard-Haughn, A. 2015. Soils in the Landscape: Micro- and macro-scale variability. Soils and Crops 2015, International Year of Soils Special Session. Saskatoon, SK.
- Ferguson, G. 2015. Using co-produced water and disposal wells to assess the geothermal potential of sedimentary basins. 2015 American Geophysical Union Joint Assembly. Montreal, QC. May 3-7.
- Ferguson, G. 2014. Heat Transport in Low-Temperature Geothermal Developments. Geological Society of America Annual Meeting. Vancouver, BC. October 19-22.
- Ferguson, G. 2014. Data, Knowledge and Research Needs. Saskatchewan Groundwater Workshop. Saskatoon, SK. Oct. 1.
- Giesy, J.P. 2015. Perfluorinated Chemicals in the Environment: Anatomy of an Environmental Issue. Canadian Society of Zoologists, Annual Meeting, May 25-29, Calgary, AB.
- Patrick, R. 2015. Prince Albert Model Forest. Board of Directors Meeting. "Source water protection planning for safe drinking water with First Nations". Prince Albert, SK, February 10.
- Patrick, R. 2015. Capilano University (Sechelt, BC campus). "Watershed Planning for Source Water Protection". Sechelt, BC. March 11.
- Pickering, I.J. 2015. Applications of X-ray Absorption Spectroscopy in Life Sciences. 17th National School on Neutron and X-ray Scattering, Argonne National Laboratory, Argonne, IL, USA, June 17.
- Pickering, I.J., and George, G.N. 2015. Metals and Molecules: Illuminating Problems in Human Health with Synchrotron Light. Seminar, Advanced Light Source, Lawrence Berkeley National Laboratory, Berkeley, CA, USA, March 27.
- Razavi, S. 2015. Sensitivity Analysis for Hydrological Inferences, Discussion Meeting on Quantification and Reduction of Uncertainties in Hydrological Inferences, invited and sponsored by the Indian Academy of Sciences, February 26-28, Bangalore (Coorg), India.

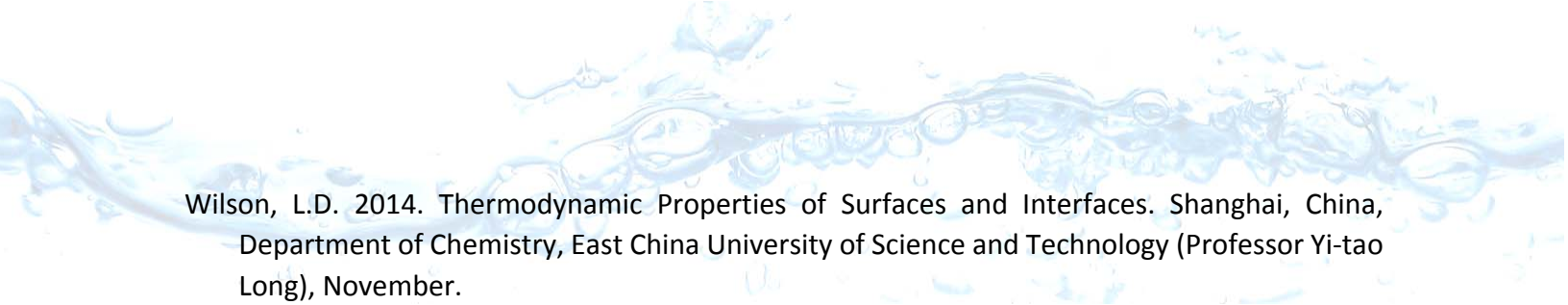
- Spence, C., Brannen, R., Hedstrom, N., Kokelj, S.V., Kokelj, S., McCluskie, M., and Westbrook, C. 2015. The strengths and weaknesses of using hydrological connectivity to interpret stream biogeochemistry. AGU-CGU Joint Congress, May, Montreal, Canada.
- Steelman, T.A., and Nowell, B. 2015. "Managing Wildfire Networks: Brokering Relationships and Mission Conflict." Webinar for U.S. Forest Service, Public Affairs. May 21.
- Steelman, T.A. 2015. "Wildfire Policy as a Socio-Ecological Problem." Invited Plenary. 13th International Wildland Fire Safety Summit and 4th Human Dimensions of Wildland Fire Conference. Boise, ID. April.
- Strickert, G.E. 2015. Livable Cities Forum: Building Flood Resilient Communities – A National Dialogue, in Calgary, AB Tools and Concepts for Designing Resilient Cities: Concept Maps, Uncomfortable Knowledge and Clumsy Solutions. September 28th – 30th, 2015.
- Strickert, G.E. 2015. Reconsidering Outreach. University of Saskatchewan Engaged Scholars Day, Saskatoon, Saskatchewan, April.
- Van Rees, K. 2015. Site and Forest Productivity. Mistik Management Ltd. Public Advisory Group Workshop. March 19, 2015. Meadow Lake SK.
- Westbrook, C.J. 2015. Beaver in Tierra del Fuegian wetlands. 2015. World Wetlands Day, University of Waterloo, February 2.
- Wheaton, E. 2015. Drought and Water Policy. Invited presentation to "Living with Less Water" conference, Institute on Science for Global Policy, 20-21 Feb, Tucson, AZ, USA.
- Wheaton, E. 2015. Droughts Challenge Water Resource Management and Policy. Policy paper prepared for the Institute on Science for Global Policy, "Living with Less Water Conference," 20-21 Feb, Tucson, AZ, USA.
- Wheaton, E. 2015. Anticipating Climate Risks for the Canadian Prairies. Invited presentation to Saskatchewan Institute of Agrologists' 2015 Convention, 15 April, Regina, SK.
- Wilson, L.D. 2015. NMR Structural Studies of Cyclodextrin-Perfluorocarbon Guest Systems. 2nd Crystal Engineering and Emerging Materials Workshop of Ontario and Quebec, Guelph, ON. (Professor D. Soldatov) [June 2015]
- Wilson, L.D. 2015. Green Chemistry Strategies for the Remediation of Waterborne Contaminants. 2015 Conference on Environmental Pollution and Public Health, Dalian, China (April, 2015)
- Wilson, L.D. 2015. Biopolymer Adsorbent Materials for Environmental Remediation. Beijing, China (Professor Xiao Feng) [April 2015]

Plenary, Key Note and Invited Lectures - 2014

- Barbour, S.L. 2014. Tracking Water Movement in Closure Landforms in Oil Sands Mines - Extending Temporal and Spatial Monitoring Scales". 2014 GSA Annual Meeting in Vancouver, British Columbia, Oral Presentation, Abstract only published (No. 246104) in GSA Abstracts with Programs Vol. 46, No. 6, Session 145-2: Pardee Keynote Session P3 (Ferguson, Manning), "Energy Resource Development and Groundwater: Looking Broader and Deeper II", Oct. 20.

- Bangsund, A.L., Hendry, M.J., Barbour, S.L. and Huang, M. 2014. Origin, transport and fate of dissolved gases in a two-tiered aquitard system, central Saskatchewan, Canada. Geological Survey Open House, Saskatoon, SK, Dec. 1-3, 2014.
- Barbour, S.L. 2014. IRC Research: Syncrude Cda Ltd seminar/mtgs/discussions: for Barbour & his students/research staff to give presentations/updates on their IRC work/projects, Edmonton AB, Nov. 25, 2014.
- Barbour, S.L. 2014. SCL Research: Syncrude Cda Ltd Base Mine Lake R&D Team meetings, Edmonton AB, Nov. 6-7, 2014.
- Barbour, S.L. (Keynote Address). 2014. SCL's 50th Anniv. R&D Seminar entitled: The Changing Colour of Environmental Research and Closure... the journey from Green to Blue, Edmonton, AB, Two presentations: Nov.5 and Nov.26, 2014, Barbour presented.
- Barbour, S.L. 2014. Geotechnical modeling using SLOPE/W, SEEP/W, SIGMA/W. GeoSlope International Geotechnical Modeling Workshop, Nov.3-4, 2014, Calgary, AB.
- Barbour, S.L. 2014. Evaluation of Soil Atmosphere Vegetation Transfers (SVAT) for Mine Closure Applications. SMA Environmental Forum, Saskatoon, October 2014.
- Barbour, S.L. (Short Course Presenter). 2014. Cover Systems for Managing Solid Waste - Design, Construction, and Performance Monitoring. Presented at: GeoRegina 2014, Regina, SK, Canada, with Mike O'Kane Justin Straker, Gord McKenna, Sept. 28, 2014.
- Barbour, S.L. 2014. SCL Hydrogeology Research: Syncrude Cda Ltd mtgs/discussions: for Barbour/Lindsay/Fleming/Ireson to give presentations/updates on their IRC work/SCL projects to D. Heisler (SCL), Saskatoon SK, Sep. 24-25, 2014.
- Bharadwaj, L. and Goldstein, B. 2014. Shale Gas Development in Canada: What are the Potential Health Impacts? Canadian Medical Association Journal October 6th, 2014. Invited Commentary.
- Dumanski, S., Pomeroy, J., and Westbrook, C. 2014. Impact of increasing rainfall and rain-on-snow on flood generation in a Canadian Prairie catchment. AGU, San Francisco, USA, Dec 15-19.
- Giesy, J.P. 2014. Effects of sub-lethal doses of organophosphorus insecticides on honey bee survival and learning. With: Y. Al Naggari, E. Naiem, M. Mona, A. Seif, C. Cutler, J.P. Giesy. To: Joint Annual meeting with Entomological Society of Saskatchewan. Saskatoon, Sk, Canada. September 28- October 1.
- Hecker, M. 2014. Characterization of adverse outcome pathways of ethynylestradiol in *Xenopus laevis* With: Tompsett A., Higley E., Pryce S., Wiseman S., Giesy J. 41st Aquatic Toxicity Workshop in Ottawa, ON, Canada. Sep 28 – Oct 1.
- Hecker, M. 2014. Effect Director Analysis: A novel approach for the assessment of complex mixtures of contaminants With: Wiseman S., Higley E., Giesy J., Jones P., Yuan H. 41st Aquatic Toxicity Workshop in Ottawa, ON, Canada. Sep 28 – Oct 1.
- Lindsay, M.B.J. 2014. Groundwater contamination, remediation, and management in mining environments. Synchrotron Environmental Science VI, September 11–12, Argonne National Laboratory, IL, USA.

- Matthies, R., Blowes, D.W., Sinclair, S.A., Lindsay, M.B.J., and Ptacek, C.J. 2014. Application of zinc isotope ratio measurements to two mine-waste systems. GSA Annual Meeting, October 19–22, Vancouver, Canada.
- Morrissey, C.A, Mineau, P., Devries, J., Sanchez-Bayo, F., Liess, M., Cavallaro, M., and Liber, K. 2014. Society for Environmental Toxicology and Chemistry. Evaluation of worldwide contamination of surface waters and relative risks to aquatic invertebrates from neonicotinoid insecticides Vancouver, B.C. November 2014.
- O'Kane, M.A., and S.L. Barbour. 2014. Challenges with measuring cover system performance. 21st Annual BC-MEND ML/ARD Workshop: “Challenges and Best Practices in Metal Leaching and Acid Rock Drainage”, UBC, Vancouver, B.C., Dec.3-4.
- Patrick, R. 2014. Technical Services Alberta Group (Alberta). Annual Conference. Edmonton, AB. Building Community Resilience with Source Water Protection. October 17.
- Patrick, R. 2014. Saskatchewan Aboriginal Land Technicians. Annual Conference. Planning for source water protection using the AANDC template. Saskatoon, SK. August 2.
- Patrick, R. 2014. Partners for the Saskatchewan River Basin. Annual Conference. Source water protection planning at Muskowekwan First Nation. Saskatoon, SK. October 27.
- Patrick, R. University of Northern British Columbia (Terrace Campus). “Getting from Good to Great: Place-Making for Sustainability in Terrace, BC”. Terrace, BC. January 14, 2014.
- Pickering, I.J. 2014. Mercury, fish and risks to human health: how synchrotron X-rays can help our understanding. Departmental Seminar, Ocean Sciences Centre, Memorial University of Newfoundland, St. John’s, NL, November 25.
- Smith, L., Barbour, S.L., Hendry, J., and van der Kamp, G. 2014. Geological Weighing Lysimeters - Applications to Mine Hydrology. SMA Environmental Forum, Saskatoon, October.
- Strickert, G.E. and Bradford, L.E. 2014. Performing Perspectives on Water Security – A play about the making of a play. The Partners for the Saskatchewan River Basin Annual Conference. Saskatoon, Saskatchewan, June 20.
- Strickert, G.E. 2014. Water Security and Systems Thinking: A introduction to fuzzy cognitive maps. Geography and Planning, GEPL385: Analysis of Environmental Management and Policy Making, School of Environment and Sustainability, University of Saskatchewan, October 7.
- Van Rees, K. 2014. Creativity and Innovation: an example with soil and art. Celebration of Teaching, University of Saskatchewan Sept 12.
- Wheaton, E. 2014. Past Climate Trends and Future Projections: Impacts on Agriculture in the Canadian Prairies. Invited presentation to the Canadian Entomology Society, 29 Sep, Saskatoon, SK.
- Wheaton, E. 2014. Food Security and Climate Change: Canadian Prairie Agriculture. Invited presentation to the Canada World Youth, 8 Oct, Saskatoon, SK.
- Wilson, L.D. 2014. Investigation of Polysaccharide Adsorbent Materials. Hangzhou, China, Institute of Polymer Science, Zhejiang University (Professor Xiao-jun Huang), November.
- Wilson, L.D. 2014. Investigation of Polysaccharide Adsorbent Materials. Tianjin, China, Environmental Science and Engineering, Nankai University (Professor Jingchun Tang), November.



Wilson, L.D. 2014. *Thermodynamic Properties of Surfaces and Interfaces*. Shanghai, China, Department of Chemistry, East China University of Science and Technology (Professor Yi-tao Long), November.

Patent

Hecker, M. 2015. United States Patent Application No. 61/242,822: Steroidogenesis Modified H295R Cells and Methods for Screening for Endocrine Disrupting Chemicals. Granted.

Laroque, C. Patent Projects (pending) - ROI 14-019 re Pro6 Band Dendrometer prototype development.

Razavi, S. and Gupta, H. 2015. Methods and systems for determining global sensitivity of a process, US (Non-provisional) Patent App. No. 14/752,268, Filed June 26, 2015.