

8:00 am – 8:10 am	OPENING REMARKS (Salon 8/9)			
8:10 am – 9:20 am	PLENARY SPEAKER – Dr. John Smol (Salon 8/9)			
9:20 am	BREAK			
Location	Salon 10	Room 5/6	Room 15/16	Room 13/14
Session & Chairs	25 th Anniversary of Canadian Environmental Effects Monitoring Kelly Munkittrick & Mark McMaster	Alternative Non-Vertebrate Test Methods for Evaluating Ecotoxicity Sarah Hughes, Jonathan Naile, David Saunders	Unconventional Oil and Gas Development: Issues and Environmental Effects Greg Goss, Henry He, Tamzin Blewett	Current-Use Pesticides Fate and Effects in Canadian Ecosystems Stacey Robinson & Vicki Marlatt
9:50 am	The development of EEM: The early years G. Craig	Characterization of gene expression in lake trout, northern pike and rainbow trout following exposure to EE2, fluoxetine and HBCD in vitro. B.K. Eisner, S. Beitel, M. Hecker Student	Role of suspended solids in the toxicity of hydraulic fracturing flowback and produced wastewater D.S. Alessi, S.L. Flynn, Y. He, E. Folkerts, Y. Zhang, D. Ruan, J.W. Martin, G.G. Goss	Pesticides in Alberta's groundwater: results of a three-year study C. Sheedy, K. Sapkota, A. Farenhorst
10:10 am		A call for consistency: What is the most appropriate form of euthanasia for fish? D. Saunders, S. Hughes, J. Naile, C. Meyer	Development of a guideline document for a surface and groundwater monitoring program for unconventional oil and gas exploration in the Mackenzie Valley B.M. Bergsma	Persistence of Garlon XRT (triclopyr) and Arsenal Powerline (imazapyr) in soils along transmission right-of-ways in the Yukon Territory Jimmo, K.J. Stewart, S.D. Siciliano Student

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10:30 am	A history of national assessment findings from Canada's Environment Effects Monitoring regulatory requirements R. Lowell, S. Richard	Applying the 3R's to regulatory trout testing: a laboratory's perspective M. J. Grey	The ultimate mixture: The effects of extremely high salt concentrations in assessing impact of hydraulic fracturing mixtures in rainbow trout T. Blewett, P. Delompre, A. Weinrauch, E. Folkerts, H. He, G. Goss	Refined hazard assessment of the POEA surfactant in Roundup: The importance of sediment in aquatic toxicology J.L. Gil, R.S. Prosser, M.L. Hanson, K.R. Solomon
10:50 am		Predicting the sensitivity of any oviparous vertebrate to any dioxin-like compound based on in vitro activation of the AHR J. Doering, S. Wiseman, A. Alcaraz, J. Giesy, M. Hecker	Developmental toxicity of organic fractions of hydraulic fracturing flowback and produced water to early life stages of zebrafish (<i>Danio rerio</i>) Y. He, Y. Zhang, E. Folkerts, J.W. Martin, G.G. Goss	Pesticides in effluents, tributaries and mainstem rivers in Alberta's South Saskatchewan River Basin: A synoptic survey N. Kromrey, C. Sheedy, D. Nilsson
11:10 am	Science in support of the Environment Effects Monitoring over the years. M.E. McMaster, K. Munkittrick, S. Courtenay, R. Lowell	Current and emerging issues in bivalves ecotoxicology F. Gagné, C. André, J. Auclair, C. Gagnon	Respirometry and swim performance alterations in zebrafish (<i>Danio rerio</i>) acutely exposed to hydraulic fracturing flowback and produced water E.J. Folkerts, T. Blewett, Y. He, G. Goss Student	Modeling the cumulative toxicity of neonicotinoid insecticide mixtures using MIXTOX analysis E.M. Maloney, C.A. Morrissey, K. Peru, J. Headley, K. Liber Student

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11:30 am	<p>EEM and sublethal toxicity testing: A 25 year symbiotic relationship</p> <p>R.P. Scroggins, L.N. Taylor, L. V. Vliet</p>	<p>Effect of lipid partitioning on predictions of acute toxicity of oil sands process affected water to embryos of fathead minnow (<i>Pimephales promelas</i>).</p> <p>G.D. Morandi, K. Zhang, S.B. Wiseman, A. Santos, J. W. Martin, J. P. Giesy</p> <p>Student</p>	<p>Isolation and characterization of the primary toxic components in oil sands process-affected water</p> <p>H. Bailey, C. Brown, S. Hughes, A. Mahaffey, B. Shore</p>	<p>Effects of neonicotinoid pesticides on non-target invertebrates in the terrestrial environment</p> <p>S.A. Robinson, J.E. Allison, J.I. Princz, E.E. Ritchie, S.D. Richardson, C. Boutin, D. Carpenter, R.L. Dalton</p>
11:50 am	<p>Dredging up the past: The confounding effects of non-mill activities on the EEM program of Irving Paper Limited, Saint John, NB</p> <p>T.K. Vickers, M.H. Murdoch</p>		<p>Population impacts in White Sucker (<i>Catostomus commersonii</i>) exposed to oil sands-derived contaminants in the Athabasca River</p> <p>C.J. Arens, J.C. Arens, N.S. Hogan, R.J. Kavanagh, F. Berrue, G.J. Van Der Kraak, M. R. van den Heuvel</p> <p>Student</p>	<p>Do neonicotinoid insecticides pose a hazard to the early life stages of freshwater mollusks?</p> <p>R.S. Prosser, E. Holman, A. Bartlett, S. De Solla, P. Gillis, S. Robinson</p>
12:10 pm – 12:50 pm	LUNCH (Salon 8/9)			
12:50 pm – 1:30 pm	PLENARY LUNCH SPEAKER – Peter Heule, Royal Alberta Museum (Salon 8/9)			

Location	Salon 10	Room 5/6	Room 15/16	Room 13/14
Session	<p>25th Anniversary of Canadian Environmental Effects Monitoring</p> <p>Kelly Munkittrick & Mark McMaster</p>	<p>Trends in Behavioral Toxicology</p> <p>Keith Tierney, Danielle Philibert, Greg Pyle</p>	<p>Community Driven Research in the North: Opportunities and Challenges</p> <p>Erin Kelly & Jennifer Fresque-Baxter</p>	<p>Linking molecular, physiological, and behavioral responses following exposure to endocrine disrupting chemicals</p> <p>Patrick Gauthier, Bastien Sadoul, Jith Thomas</p>
1:30 pm	<p>Where do we go from here? Lessons from 25 years of Environmental Effects Monitoring (EEM) in Canada</p> <p>T. Arciszewski, K.R. Munkittrick</p>	<p>Soil invertebrates avoidance from a hydraulic lubricating oil</p> <p>A. Gainer, S.D. Siciliano</p> <p>Student</p>	<p>NWT-wide Community-based Water Quality Monitoring Program</p> <p>E.Kelly</p>	<p>THC exposure during gastrulation alters heart rate and neuronal morphology in zebrafish</p> <p>D.W. Ali, K. Ahmed, MD. Amin, R. Mukherjee</p>
1:50 pm	<p>Review of the environmental research funded by the Canadian pulp and paper industry in response to the Environmental Effects Monitoring Program</p> <p>P. Martel</p>	<p>The effects of oil sands processed-affected water on <i>Daphnia magna</i></p> <p>D.T. Steinkey, E. Lari, G.G. Pyle</p> <p>Student</p>	<p>Slave River and Delta Partnership (SRDP): Experiences and insights from a community-based monitoring program in the Northwest Territories</p> <p>R. Bjornson, J. Fresque-Baxter, Slave River and Delta Partnership</p>	<p>A combined transcriptomic and proteomic approach to identify toxicity pathways in early-life stages of Japanese medaka (<i>Oryzias latipes</i>) exposed to 1,2,5,6-tetrabromocyclooctane (TBCO)</p> <p>S.B. Wiseman, J. Sun, S. Tang, H. Peng, D. Saunders, T. Stang, J. Doering, M. Hecker, P. Jones, J. Giesy</p>
2:10 pm	<p>Investigation of cause: A multi-cycle review of contributions to pulp & paper EEM</p> <p>D.L. MacLatchy, T.G. Kovacs, P.H. Martel, M.E. McMaster, B.I. O'Connor, J.L. Parrott, M.R. van den Heuvel, G.J. Van Der Kraak, M.L. Hewitt</p>	<p>Immediate interaction of OSPW with the olfactory system of fish</p> <p>E. Lari, G.G. Pyle</p> <p>Student</p>	<p>Participatory action research as community-driven research</p> <p>A. Legat</p>	<p>Development of an adverse outcome pathway for neurobehavior in several different species of larval fish to predict ecological impacts from molecular responses</p> <p>C.A. Murphy, M. Carvan, N.V. Garcia-Reyero, M. Jones</p>

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2:30 pm	<p>History of using the 2 SD normal range as a generic effect-size criterion in EEM</p> <p>B. Kilgour, K. Somers</p>	<p>The antidepressant venlafaxine impacts development and behaviour in larval fathead minnow</p> <p>W.A. Thompson, M. M. Vijayan</p> <p>Student</p>	<p>"One voice" to monitor Northern Canada's freshwater aquatic environment: Method development to use Inuit traditional knowledge and western science in conjunction</p> <p>R.A. Nesbitt, N. Hutchinson, L. Manzo, B. Parlee</p>	<p>The pharmaceutical fluoxetine as endocrine disruptor in teleost fish</p> <p>J.A. Mennigen</p>
2:50 pm	BREAK			
3:20 pm	<p>How before-after-control-impact (BACI) designs can improve biological monitoring for mines under Canada's EEM programs</p> <p>B.J. Pyper, R. Hill, G. Mann</p>	<p>Modelling zebrafish embryo photomotor responses to test for the effects of contaminants and their mixtures</p> <p>P.T. Gauthier, M. Vijayan</p>	<p>Collaborative stream health monitoring in the Sahtu region</p> <p>J. Kanigan, K. Chin</p>	<p>Development and function of the cortisol stress axis: A marker of performance disruption in fathead minnows.</p> <p>B. Sadoul, W.A. Thompson, P. Gauthier, M.M. Vijayan</p>
3:40 pm	<p>Environmental effects monitoring development in Brazil</p> <p>J.L. Parrott, T.H. Furley, P.M. Pavione, K.G. da Costa, C. Perônico, F.C. Barreto, T.H. Basilo, M.G. Paes, M. Hewitt, K. Munkittrick, M. McMaster</p>	<p>A comparison of exposure to diluted bitumen and conventional crudes on visual learning of <i>Danio rerio</i> larvae</p> <p>C.P. Philibert, D.A. Philibert, K. Tierney</p> <p>Student</p>	<p>Research priorities in the Gwich'in Settlement Area</p> <p>K. Hunt</p>	<p>The effects of endocrine disrupting chemicals singly and in mixture on developing zebrafish</p> <p>D. Kurrasch, C. Kinch, H. Habibi</p>

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4:00 pm	Seven EEM cycles of learning and action at Grande Prairie M. Davies, C. Schwindt, C. Fraikin, M.E. Lebo, G. Pippas, G. Bouree	The effects of thyroid hormones, thyroid hormone disruptors, and treated wastewater on chemosensation in North American bullfrog tadpoles J. Heerema, C.C. Helbing, G.G. Pyle Student	Understanding and predicting fish mercury levels in the Dehcho region H. Swanson, G. Low, B. Branfireun, N. Kassi	Maternal transfer of bisphenol A causes generational toxicities in zebrafish J.K. Thomas, M. Vijayan
4:20 pm	Response of biological communities to pulp mill effluent treatment upgrades K.R. Petersen, C. Brown, B. Fraser	Ducks on drug soup K. Tierney, P. O Welsh, C. Paszkowski		Molecular and behavioural responses of caged goldfish to pharmaceuticals and personal care products exposure in Cootes' Paradise D.B.D. Simmons, J. Sherry, D. Muir, S. Balshine, E. McCallum, B. Chandramouli, J. Cosgrove
4:40 pm	Recovery of the intertidal communities at sediment contaminated sites in British Columbia: 25+ years of monitoring data analysis and modeling S. Bard	Toxicity of metal-contaminated sediments from the Upper Columbia River, Washington, to the early life-stage White Sturgeon (<i>Acipenser transmontanus</i>) E. E. Little, H.J. Puglis, R.D. Calfee		
5:00 pm – 7:00 pm	POSTER SESSION (Salon 12)			

Location	Salon 10	Room 5/6	Room 15/16	Room 13/14
Session	Mining and Environment Charles Dumaresq & David Hamilton	General Toxicological Effects of Contaminants in Aquatic Species Chris Kennedy & David Janz	Inhalation Toxicology and Air Quality Management Mandy Dumanski	Advances in Water Quality Guidelines and Benchmarks Doug Spry & Joanne Little
8:00 am	Challenges with toxicity testing at an arctic diamond mine A.E. Hood		What's that smell? Exploring the factors that influence environmental performance at Alberta's Kraft Pulp Mills N.P. Pysh	International perspective on water quality benchmarks U.A. Schneider
8:20 am	The benefit of a strong study design in metal mining EEM; case study from AREVA's McClean Lake Operation S.J. Benson, A. Rosaasen, B.W. Kilgour	Interactive effects of 2- and 3-way mixtures of Cu, Ni, and Cd on rainbow trout (<i>Oncorhynchus mykiss</i>) olfaction S.J. Bogart, E. Lari, A. Manek, W.A. Dew, G.G. Pyle	Learnings in developing a regional industrial air emissions management program P. Le, M.J. Wesley	Current status and future directions for Canadian Environmental Quality Guidelines J. Little, D. Spry, T. El-Fityani, T. Fletcher, M. Nowierski
8:40 am	Improving mining assessment and monitoring P.M. Chapman	Metabolic and cardiovascular effects of dietary selenomethionine exposure in adult zebrafish (<i>Danio rerio</i>) C.M. Pettem, D.M. Janz, L.P. Weber Student	An overview of odour issues in Fort McKay and community initiatives to understand and address these issues D.R. Spink, J. Dennis, R. Abel	The importance of updating water quality guidelines C. Burnett-Seidel

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9:00 am	Development and standardization of new saline effluent toxicity test methods using marine fish and invertebrate species R.P. Scroggins, L. Taylor, L.V. Vliet, R. Hennessy	Natural selection and aquatic ecotoxicology in the oil sands: Has pre-exposure to natural sources of bituminous oil sands toxicants stimulated local adaptation in forage fish populations inhabiting Alberta's oil sands region? S.S. Chow, G. Pyle Student	Controlling odours in the Peace River area M.J. Zelensky	Federal environmental quality guidelines: Recent progress D. Spry, P. Cureton, S. Dixit
9:20 am	Natural concentrations of manganese cause mortality in two standard freshwater sediment tests: A case study of four pristine lakes in northwestern BC. R.A. Hill, B. Lucas, J. Elphick, E. Franz, G. Mann	Assessment of acute and chronic toxicity of diluted bitumen (dilbit) and dilbit altered to fishes and aquatic invertebrates P.Y. Robidoux, V. Bérubé, J. Leblanc, M. Desrosiers	Comparative toxicity of airborne particulate matter collected in the vicinity of industrial sites E.M. Thomson	British Columbia Contaminated Sites Regulation Update 2016/2017 A. Brisebois, J. Puhallo
9:40 am	BREAK			
10:10 am	Sulphate effects on selenium accumulation by algae: extrapolating from lab to field A.M. deBruyn, J.V. Geest, J.R. Elphick, B. Lo	Identifying serum biomarkers of diluted bitumen exposure in sockeye salmon S.L. Alderman, L.A. Dindia, C.J. Kennedy, A.P. Farrell, T.E. Gillis	Direct & indirect impacts from industrial emissions on the aboriginal community of Fort McKay J.H. Dennis, D. Spink, R. Abel, B. Arrobo	New approaches to deriving SSD to inform water quality guidelines A. Tillmanns, C. Schwarz

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Session	Mining and Environment Charles Dumaresq & David Hamilton	General Toxicological Effects of Contaminants in Aquatic Species Chris Kennedy & David Janz	Industrial Development and the Potential Environmental and Health Implications to Aboriginal Communities Navdeep Toor & Brenda Miskimmim	Advances in Water Quality Guidelines and Benchmarks Doug Spry & Joanne Little
10:30 am	Effects of elevated salinity and dissolved organic matter in surface water from an oil sands mine end-pit lake on the toxicity of metals to zooplankton (<i>Ceriodaphnia dubia</i>) K.B. White, K. Liber Student	Comparing the photo-induced toxicity of polycyclic aromatic hydrocarbons in two amphibian species, <i>Xenopus laevis</i> and <i>Lithobates sylvaticus</i> Z. Currie, N. Hogan Student	Unifying Aboriginal Knowledge and Science to support community-based monitoring in a large river and delta L. Doig, T. Jardine, C. Mantyka-Pringle, L. Bradford, L. Bharadwaj, J. Fresque-Baxter, E. Kelly, G. Somers, K-E. Lindenschmidt, P. Jones	Perspectives on the appropriate use of laboratory toxicity test information in deriving water quality guidelines and incorporating toxicity modifying factors J.R. Elphick, A.M. deBruyn, C.V. Eickhoff
10:50 am	Consideration of environmental effects in setting acceptable release limits S. Fernandes, K. Woolhouse, C. Lucas	Cardiac and metabolic effects of benzo-a-pyrene and 5-azacytidine in juvenile rainbow trout (<i>Oncorhynchus mykiss</i>) F. Leal Student	Using inputs from an indigenous community in evaluating remedial options at a large mine site H. Phillips, L. Leon	Development of a proposed Canadian Water Quality Guideline for molybdenum J.R. Elphick, B.T. Lucas, C. Quinteros, C. Burnett-Seidel
11:10 am	Environmental Study of a Mine 25 years after Closure C. Brown, K. Petersen, B. Fraser	Determination of acute and sub-chronic toxicity of emerging contaminants in early life stages of three Canadian fish species D.R. Schultz, S. Tang, C. Miller, S. Wiseman, D. Janz, M. Hecker Student	The influence of hydropeaking on growth and mercury concentrations of low-pitched shoreline dwelling spottail shiner (<i>Notropis hudsonius</i>) D. Green, D. Janz, T. Jardine, L. Weber Student	Water hardness and chloride toxicity towards aquatic life A. Knafla, I. McIvor
11:30 am		Assessing the toxicity and bioaccumulation of substituted phenylamine antioxidants in sediment exposures with <i>Hyalella azteca</i> and <i>Tubifex tubifex</i> A.J. Bartlett, R.S. Prosser, H. Ikert, D. Schissler, D. Milani, P.L. Gillis, J.L. Parrott, V.K. Balakrishnan		Initial steps towards updating British Columbia's water quality guideline for copper A. Azizishirazi, A. Tillmanns, G. Pyle

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11:50 am		The effect of sediment-derived substituted phenylamine antioxidants to different life stages of a freshwater mussel R.S. Prosser, P. Gillis, E. Holman, J. Toito, D. Milani, A. Bartlet, J. Parrott, V. Balakrishnan		
12:10 pm – 12:50 pm	LUNCH STUDENT-MENTOR LUNCH (Salon 8/9)			
12:50 pm – 1:30	PLENARY LUNCH SPEAKER – Alberta Geological Society (Salon 8/9)			

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Session	<p>Mining and Environment Charles Dumaresq & David Hamilton</p>	<p>General Toxicological Effects of Contaminants in Aquatic Species Chris Kennedy & David Janz</p>	<p>New Methods and Novel Approaches for Assessing and Monitoring Environmental Contaminants Rick Scroggins & Pamela Martin</p>	<p>Innovative Regulatory Approaches to Assessing and Managing Environmental Effects David Huebert & Rick Walbourne</p>
1:30 pm	<p>Multiple years of non-lethal mercury monitoring in lake trout at the Diavik Diamond Mine T. Darwish, C. James, H. Machtans, D. Wells</p>	<p>Reproductive and general health assessment of fathead minnow (<i>Pimephales promelas</i>) populations inhabiting an effluent-dominated stream, Wascana Creek, SK. S. Hanson, T. Bagatim, K. Steeves, S. Wiseman, N. Hogan, A. Hontela, P. Jones, J. Giesy, M. Hecker Student</p>	<p>Ahead by a century: Laboratory research to support the development of a standardized test method using a native amphibian B.P. Lo, P. Jackman, L.V. Vliet</p>	<p>Monitoring, reporting, and adaptive management: Connecting the dots between environmental assessment, licensing, and operations for major developments B.A. Wheler</p>
1:50 pm	<p>Surface water quality monitoring under the Joint Oil Sands Monitoring Program in the Lower Athabasca River and downstream receiving environments K.A. Pippy, N.E. Glozier</p>	<p>Evaluation of an ozonation wastewater treatment technology for reducing the toxicity of micropollutants to fish N. Maya, D. Nasuhoglu, F-J. Chassaing, V. Yargeau, C. Metcalfe Student</p>	<p>Development and validation of a standardized amphibian test method using the northern leopard frog, <i>Lithobates pipiens</i> J. Miller, L.V. Vliet, L. Taylor, R. Scroggins</p>	<p>Integrating adaptive management into regulatory permits in the NWT N. Hutchinson, K. Racher</p>
2:10 pm	<p>Data methods and quality control measures for a passive water quality monitoring program in the oil sands region of Alberta, Canada C-L. Epp, L. Levesque, N. Glozier</p>	<p>Targeted metabolomics for the monitoring of effects of pollution on sentinel species in the Great Lakes B. Chandramouli, H. Butler, T. Watson-Leung, S. Kleywegt, P. Helm, J.R. Cosgrove</p>	<p>How to assess risk from contaminated sites to amphibians. Introduce audience to FCSAP Ecological Risk Assessment Guidance Module 7: Amphibian Risk Assessment F. Cloutier, E. Liu</p>	<p>Independent Environmental Monitoring Agency (IEMA): An innovative northern initiative M. Casas</p>

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2:30 pm	The assessment of toxicity of mixtures in risk assessment: Old ideas in new light J.R. Purdy, A. Gainer, S.D. Siciliano	Relative sensitivity of the Pacific kelp, <i>Macrocystis pyrifera</i> test and other bioassays used to evaluate adverse effects in marine ecosystems C.V. Eickhoff, J.R Elphick	Mollusca representation in species sensitivity distributions: the use of the Ramshorn snail <i>Planorbella pilsbryi</i> in toxicity testing R.S. Prosser, J. Rodriguez-Gil, P. Sibley, K. Solomon, D. Poirier	Advantages associated with two different approaches to regulatory oversight A.E. Hood
2:50 pm	BREAK			

Location	Salon 10	Room 5/6	Room 15/16	Room 13/14
Sessions	Expecting the Unexpected: Case Studies in Responding to Spills and Unintentional Releases Cat Evans, Chris Teichreb, Nikolaus Gantner	Genomics in Ecotoxicology Anikó Takács-Cox	New Methods and Novel Approaches for Assessing and Monitoring Environmental Contaminants Rick Scroggins & Pamela Martin	Innovative Regulatory Approaches to Assessing and Managing Environmental Effects David Huebert & Rick Walbourne
3:20 pm	A weight-of-evidence study assessing the potential for toxic effects on sensitive aquatic habitat following a coal train derailment in an urban environment G. Gilron, J. Trowell, K. Graf, L. Patterson, F. Perello, C. Chan, S. Bard	Application of genomics as indicators of freshwater wildlife health C. Helbing, I. Birol, G. van Aggelen	Toxicity of polychlorinated biphenyls and N-phenyl-1-naphthylamine in juvenile turtle <i>Chelydra serpentina</i> T-L. Colson, S.R. DeSolla, V.S. Langlois	Developing a load management approach for water quality in the North Saskatchewan River A. Tuininga, J. Wesley
3:40 pm	Assessing the ecotoxicity of crude oils, chemical composition, exposure time and importance of biomarkers R. Memarian, H. D. Dettman	Reconstructing cyanobacterial population trends in freshwater lakes using metagenomic techniques and physicochemical analyses T. Tse, T. Song, S. Wiseman, L. Doig, M. Hecker, J. Giesy, P. Jones	New endpoint of tail length in fathead minnow embryo-larval tests J.L. Parrott, C. Sullivan, K. Shires, C. Lavalle, Q. Rochfort	Towards an integrated water management approach for oil sands mines K. Westcott, S. Moody, K. Sharma, T. Hebben
4:00 pm	Environmental impacts of the largest coal slurry spill in North America: the Obed Mountain Mine release into the Athabasca River (Alberta, Canada) C.A. Cooke, C. Schwindt, M. Davies, W.F. Donahue, E. Azim		Assessing the lethal and sublethal toxicity of neonicotinoid insecticides to the mayfly, <i>Hexagenia</i> spp A. J. Bartlett, A. M. Hedges, L. R. Brown, John Struger, S.R. de Solla	Turbidity Monitoring: An improved approach to quantifying in-stream construction impacts G. Courtice

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4:20 pm	<p>Higher than expected metals and pesticide concentrations from major tributaries and approved wastewater effluents into receiving mainstem rivers: A Southern Alberta synoptic survey case study.</p> <p>N. Kromrey</p>		<p>Relative risk approach: A novel approach for the ecological risk classification of inorganic substances under the next phase of the Chemicals Management Plan</p> <p>M. Beking, V. Dorais, M-C. Sauvé, R. Bouwhuis, J. Gauthier, O. Marois, M. Lin, J. Hill</p>	<p>Updates to the proposed Canadian regulatory framework for the environmental assessment of new active ingredients in human and veterinary drugs</p> <p>T. Francis, J. Chateauvert, S. Kullik</p>
4:40 pm	<p>Discussion</p>		<p>Characterization of the endocrine potencies of municipal effluents across Canada using in vitro bioassays</p> <p>T. Bagatim, S. Hanson, H. Yuan, K. Steeves, S. Wiseman, N. Hogan, A. Hontela, P. Jones, J. Giesy, L. Bragg, H. Dhiyebi, M. Servos, C. Gauthier, F. Gagné, M. Hecker</p> <p>Student</p>	
5:00 pm – 6:30 pm	<p>POSTER SESSION (Salon 12)</p>			
7:00 pm – 12:00 am	<p>BANQUET (Hall D)</p>			

Location	Salon 10	Room 5/6	Room 15/16	Room 13/14
Session	Wildlife Toxicology and Population Implications Judit Smits & Louise Champoux	Assessing Natural Variability: Dare to be (Quantifiably) Different Rainie Sharpe	Effective Communication in Ecotoxicology Guy Gilron	Analytical Developments William Shotyk
8:10 am	Polycyclic aromatic hydrocarbon impacts on pre-migratory fuelling in two shorebird species. K. Bianchini, D. Newstead, C.A. Morrissey Student	Successes and challenges encountered in defining natural variability for water quality in northern aquatic systems T.M. Hall		
8:30 am	Biomarkers and ecological tracers provide useful information in support of monitoring contaminants in great blue heron eggs and nestlings along the St. Lawrence River L. Champoux, M. Boily	Testing against 'normal' with environmental data B. Kilgour, K. Somers, K. Munkittrick, T. Barrett, A. Francis		
8:50 am	Population genetic tools for non-invasive monitoring of North American river otter population dynamics C.F. Klutsch, P.J. Thomas	Definition of normal range using box plot analysis D. Huebert, M. Sanborn	Effective communication in ecotoxicology G. Gilron	Measurement of dissolved trace-metal species distributions at environmentally-relevant concentrations under in-situ conditions using field-flow fractionation coupled to ICP-MS C.W. Cuss, I. Grant-Weaver, M. Donner, M. (Babar) Javed, T. Noernberg, N. Sinnatamby, W. Shotyk

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Sessions	Wildlife Toxicology and Population Implications Judit Smits & Louise Champoux	Assessing Natural Variability: Dare to be (Quantifiably) Different Rainie Sharpe	Effective Communication in Ecotoxicology Guy Gilron	Analytical Developments William Shotyk
9:10 am	Evaluating mercury guidelines for furbearers using a predictive meta-model K.M. Eccles, P. Thomas, L. Chan Student	Predicting future observations by applying iterated bootstrapping to existing datasets Tim Arciszewski, Kelly R Munkittrick	Effective presentations: A business development perspective Joshua Dias	Chemical speciation of arsenic and selenium in aquatic systems: Analytical techniques and their application M.W. Donner, W. Shotyk, T. Siddique Student
9:30 am	Health of leopard frogs in Hamilton Harbour: A caging study Pamela Martin, Glenn Barrett, Kim Hughes, Shane de Solla	A complicated life in Reversing Falls: The dynamic tale of EEM and Irving Pulp and Paper, Limited in Saint John, New Brunswick T.K. Vickers, M.H. Murdoch	When only zero risk is acceptable: Bridging the gap between public and scientific understanding of risk S. Swanson	Trace metal distribution in dissolved and particulate forms in the Lower Athabasca River M.B. Javed, I. Grant-Weaver, W. Shotyk
9:50 am	Health impact assessment and remediation of OSPW, using embryonic zebrafish C. Toth, G. Chua, H. R. Habibi	Adaptive management in Canada's Northwest Territories: A case study of cesium and thallium in fish tissue at a diamond mine R.L. Sharpe, M. D. Jaeger, C. James, H. M. Machtans, P.M. Chapman, A. Hood	Panel Discussion	Application of ultraclean lab methods for the determination of dissolved trace metals in the Lower Athabasca River: challenges, opportunities and new perspectives W. Shotyk, B. Bicalho

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10:10 am	Developing LA-ICP-MS analysis of Se in pectoral fin rays of white sturgeon (<i>Acipenser transmontanus</i>) from San Francisco Bay as a non-lethal assessment technique. V. Palace, L. Freidrich, J. Sun, P. Trowbridge, Z. Jackson, S. Hughes, N. Halden	GROUP DISCUSSION AND SYNTHESIS OF CONCEPTS		Enhanced analytical techniques for keeping track of crude oil in water environments H.D. Dettman
10:30 am	BREAK			
10:50 am	PLAYLE AWARD PRESENTATION – Anita Massé (Salon 8/9)			
11:20 am	CEW ANNUAL GENERAL MEETING (Salon 8/9)			
12:00 pm	3MT COMPETITION (Salon 8/9)			
12:40 pm	LUNCH (Salon 8/9)			
1:10 pm	CEW 2017 PRESENTATION (Salon 8/9)			
1:30 pm – 2:00 pm	STUDENT AWARDS and CLOSING REMARKS (Salon 8/9)			