

Day 1 - CWRA 2023 Conference

Monday April 3, 2023

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| 7:30 - 8:30 | Registration, Visit Exhibitors | Continental Breakfast |
| 8:30 - 9:00 | Welcome Remarks and Conference Opening | |
| | Session 1 | |
| 9:00 - 10:00 | Dr. Alain Pietrioniro Univerisity of Calgary - Schulich Chair in Sustainable Water Systems in a Changing Climate | |
| 10:00 - 10:30 | Break, Visit Exhibitors | |
| | Session 2 - Urban and Community Hydraulics | Session 3 - Irrigation and Agriculture |
| 10:30 | Faruk Bhuiyan Overland Flood Risk Assessment Using 2D Hydrologic-Hydraulic Modeling Techniques | Guillermo Charles Garcia South San Joaquin Irrigation District (SSJID) Modernization Program |
| 10:50 | Laurel Fowler Challenges with Storm Sewer Flow Monitoring for Numerical Modelling | Richard Phillips Irrigation Districts and Drought |
| 11:10 | Mike Gallant Demonstrating the Benefits of Soil and Water Bioengineering Techniques | Kumar Kumarasingam "Big Pipe" Replaces "Big Canal" |
| 11:30 | Hayley Melrose Integrating Western Science and Traditional Knowledge: Hydraulic Modelling with a First Nation on the Canadian Prairies | Devon van Dassel Horsefly Regional Emergency Spillway - Design and Construction |
| 11:50 | Q and A | |
| 12:00 - 13:30 | Lunch and Exhibitors | |
| | Session 4 - Flood Prediction and Mitigation | Session 5 - Predicting Climate and Precipitation |
| 13:30 | Deighen Blakely Overview of the Drumheller Flood Mitigation Program | Alida Thiombiano Effects of Spatial and Temporal Changes in Hydroclimatic Conditions in the Alberta Oil Sands Region on Water Availability |
| 13:50 | Cuahtémoc Tonatiuh Vidrio Sahagún A practice-oriented framework for stationary and nonstationary flood frequency analysis | Dayal Wijayarathne The effect of orographic bias of RDRS in hydrological simulations |
| 14:10 | Caitlyn Howe December 2022 Ice Jam Event | Patrick Grover Development of Precipitation Thresholds for Geomorphic Monitoring Programs in the Canadian Prairies |
| 14:30 | Joel Trubilowicz Flood Hazard Identification and Mapping Program (FHIMP): Western Canada highlights and upcoming work | Hossein Bonakdari Hourly Precipitation Forecasting Using Deep Learning Technique: A Case Study of Quebec City |
| 14:50 | Q and A | |
| 15:00 - 15:30 | Break, Visit Exhibitors | |
| | Session 6 - Hydrologic Impacts of Climate Change | Session 7 - Indigenous Water Discussions |
| 15:30 | John Pomeroy A Tale of Two Basins: The Future Hydrology of the Bow and Elbow River Headwaters | Open discussion session |
| 15:50 | Paul Whitfield Synchronized Hydrological Responses to the 2021 Heat Dome in Western Canada | |
| 16:10 | Ajay Bajracharya Assessing the Impact of Climate change on water balance partitioning and permafrost degradation in a cold region | |
| 16:30 | Alexander Giberson Hydrologic Modelling of the Fraser River Basin for Multivariate Climate Impact Assessment | |
| 16:50 | Q and A | |
| 17:00 - 18:00 | Visit Exhibitors and CWRA Annual General Meeting | |
| 18:00 - 21:00 | Banquet | |

Day 2 - CWRA 2023 Conference

Tuesday April 4, 2023

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| 8:00 - 9:00 | Registration, Visit Exhibitors | Continental Breakfast |
| | Session 8 | |
| 9:00 - 10:00 | Kim Sturgess Water Smart - Water Management Systems | |
| 10:00 - 10:30 | Break, Visit Exhibitors | |
| | Session 9 - Water Management, Best Practices, Policy, and Governance | Session 10 - Water Quality |
| 10:30 | Fred Wrona A “One-Water” approach to advancing knowledge mobilization through improving linkages between societal needs, research, and policy relevant decision-making | Eric Camm Taste and odour issues in the drinking water supply of Calgary, Alberta: Developing new monitoring and laboratory analysis tools for characterizing source and transport of T&O compounds. |
| 10:50 | Kim Sturgess South Saskatchewan River Operations Model: a 15 Year Collaborative Journey | Victoria Arnold Assessing Drinking Water Quality Risks from Firefighting Products |
| 11:10 | Spenser Robertson Lessons Learned during the Drumheller Flood Mitigation Program Delivery | Bradley Peter and Kurstyn Perrin LakeKeepers and Indigenous Community Based Monitoring |
| 11:30 | Mya Lyse Transboundary climate justice: the use of stable water isotope analysis and hydrological modelling to identify water loss dynamics within the Milk River watershed | Jun Tu Spatial Variations in the Associations of Surface Water Quality with Roads and Traffic across an Urbanization Gradient in Northern Georgia, USA |
| 11:50 | Q and A | |
| 12:30 - 13:00 | Lunch and Exhibitors | |
| | Session 11 - Advances in Hydrological Modelling | Session 12 - Surfacewater - Groundwater Interactions |
| 13:30 | Dayal Wijayarathne HYPE workflow: separating model-agnostic and model-specific parts of model configuration | Md Shihab Uddin Estimating Spatial Distribution of Depression-focused Groundwater Recharge in the Canadian Prairies |
| 13:50 | Mohamed Ahmed Nelson-MIP I: A Multi-model Intercomparison Project on the Saskatchewan-Nelson-Churchill River Basin | Jack Kostick A Comparison of Groundwater-Surface Water Partitioning Methods to Assess the Impacts of a Changing Landscape on Athabasca Oil Sands Water Availability |
| 14:10 | Andrew Tefs Reconstructing pre-development discharge timeseries and variability in two semi-distributed hydrologic models | Lelia Weiland Linear Features Alter Local Ecohydrologic Conditions |
| 14:30 | Mohamed Ahmed Incorporating The Fill and Spill Mechanism in the HYPE Modelling Framework | Tori Harrison Connecting soil moisture and organic soil depth to wildfire risk in Peatland Dominated Headwater Catchments of the Boreal Plains |
| 14:50 | Q and A | |
| 15:00 - 15:30 | Break, Visit Exhibitors | |
| | Session 13 - Communicating Water Science: Visualization and Dissemination | Session 14 - Monitoring and Observations |
| 15:30 | Paul Whitfield CSHShydrology - an R package for Canadian hydrology | Terri Whitehead Establishing a Long-Term Isotope Monitoring Network in the St. Mary / Milk River Basins |
| 15:50 | Megan Leung The Importance of Knowledge Mobilization in Science: Making Space for the Arts | Emily Anderson Continuous suspended sediment monitoring of the Athabasca River in the oil sands region of Alberta |
| 16:10 | David Barrett Reimagining the Atlas of Alberta Lakes: a discussion | Maria Gabriela Tejada Toapanta Snow Lysimeter for Sampling Snowmelt Isotopes |
| 16:30 | Drew Scherban Communications and learnings during the Drumheller Flood Mitigation Program Delivery | Caitlyn Howe Bow River Meander Belt Width Analysis |
| 16:50 | Q and A | |
| 17:00 - 18:00 | Closing Remarks | |