



GWF FINALE

2023 Open Science Meeting

Results, Capacities & Solutions

May 15-17, 2023

TCU Place &
Wanuskewin Heritage Park
Saskatoon



Global Water Futures

and Inaugural Meeting of *Global Water Futures Observatories*

Sunday, May 14 (Times are in Central Standard Time)

Sunday Evening Reception (University of Saskatchewan Convocation Hall)	
5:00 – 8:00 PM	Attendees arrive and are welcomed to Saskatoon and the GWF Finale with an ice-breaker reception with food.

Monday, May 15 (Times are in Central Standard Time)

7:35 AM sharp	Busses depart from USask residence to transport people to TCU Place
7:00 – 8:30 AM	Arrival, check-in, breakfast, poster setup
GWF Final AOSM Welcome and Introduction. Chair: Corinne Schuster-Wallace	
8:30 – 8:40 AM	Meeting opening by Elder Roland Duquette
8:40 – 8:50 AM	Baljit Singh, Vice President Research, University of Saskatchewan
8:50 – 9:00 AM	Christian Chouinard, Director, CFREF, CERC and C150 Programs
9:00 – 9:10 AM	Anthony Blair Dreaver Johnston, Mistawasis Nêhiyawak, and Dawn Martin-Hill, McMaster University; representatives of the GWF Indigenous Engagement Committee
9:10 – 9:20 AM	Howard Wheeler, CERC Emeritus and Founding Director, GWF
9:20 – 9:45 AM	Summary and state of GWF presentation by John Pomeroy, Director, GWF
9:45 – 10:15 AM Refreshment break	
Thematic and Topical Panel Discussions, Lightning Talks	
10:15 – 11:15 AM	Changing Climate and Extremes (Convener: Julie Thériault) 10:15: Julie Thériault – Climate and Extremes work in GWF 10:35: Chandra Rajulapati – Paradigm Shift in Downscaling Climate Model Projections 10:45: Zhenhua Li – Weather Research and Forecasting (WRF) CONUS II historical and future pseudo-global warming meteorological simulations 10:55: Scott Herbert and Kevin Sagan – Perspectives on extremes from Manitoba Hydro 11:05: Questions and Discussion
11:15 – 11:30 AM	Poster lightning talks (Chair: Nancy Goucher) Zelalem Tesemma, Zihua He, Lauren Miranda, Shakil Ahmed, Peter Lawford, Renee Carriere

11:30 – 12:30 PM	Changing Water Budgets, Cryosphere and Rivers (Convener: Al Pietroniro) 11:30: Al Pietroniro – Key Findings from Core Modelling: •Advanced Climate Runs across Canada •Improved Forecasting 11:40: Mohamed Elshamy – Modelling Permafrost and Projecting Change in the Mackenzie Basin - A Case Study 11:50: Karl-Eric Lindenschmidt – Advanced Forecasting Systems for River Ice 12:00: Chris Marsh – The Next Generation Snow Forecasting System 12:10: Prabin Rokaya – Knowledge Integration – what it takes? 12:20: Questions and Discussion
12:45 PM	Busses depart from TCU Place to Wanuskewin Heritage Park
Lunch and Indigenous-focused and led events at Wanuskewin Heritage Park	
1:00 – 2:15 PM	Lunch and Welcoming Drum (Darrell Paskimin)
1:00 – 2:15 PM	Arrival at Wanuskewin Welcome and significance of drum and food, Elder Roland Duquette Welcome from Darlene Brander, CEO of Wanuskewin Prayer from Elder Roland Duquette Lunch served
2:15 – 3:45 PM	Presentation of the GWF Mistawasis Nêhiyawak Statement – Everyone Together 2:15: Welcome from Anthony Blair Dreaver Johnston 2:20: Indigenous Women and Water (Elder Mary Sandy and Dawn Martin-Hill) 2:30: Presentation of Statement (Anthony Blair Dreaver Johnston and Dawn Martin-Hill) 2:50: Other Gathering Participants invited to speak to the Statement 3:15: Open Discussion and Questions
3:45 – 4:15 PM	GWF Indigenous Community Water Research Sharing and Experiences Chair: Anthony Blair Dreaver Johnston
4:15 – 5:00 PM	Self-guided tour of Wanuskewin galleries and trails
5:00 PM	Busses depart Wanuskewin and return to TCU Place
Reception and Dinner	
5:30 – 7:00 PM	Cash-bar reception, Tapas, and poster viewing / networking
7:00 – 9:00 PM	Public Event Virtual Water Gallery: Live in Saskatoon
8:00 and 9:00 PM	Busses depart TCU Place and return to USask residence

Tuesday, May 16 (Times are in Central Standard Time)

7:35 AM sharp	Busses depart from USask residence to TCU Place
7:00 – 8:30 AM	Arrival, breakfast
Thematic and Topical Panel Discussions, Lightning Talks	
8:30 – 9:30 AM	Changing Agricultural Basins (Conveners: Merrin Macrae, Warren Helgason) 8:30: Merrin Macrae & Warren Helgason – Changing Agricultural Basins in Canada 8:50: Guided Panel with 5-6 minute contributions from: Jane Elliott (ECCC), Roy Brouwer and Nancy Goucher (U Waterloo), Phil Harder and Colin Whitfield (USask) 9:20: Questions and Discussion
9:30 – 9:45 AM	Poster lightning talks (Chair: Monica Morrison) Predrag Rajsic, Joey Simoes, Lamisa Malik, Allana Santos, Ruchi Bhattacharya, Haoyu Yin, Jiangyue Ju

9:45 – 10:45 AM	Changing Groundwater (Conveners: Dave Rudolph, Grant Ferguson) 9:45: Dave Rudolph, Grant Ferguson – Overview of Groundwater Studies in GWF 9:50: Grant Ferguson – Deep and shallow groundwater within the Prairie Regions 9:58: Jeff McKenzie – Aquifer and well vulnerability within the Northern Landscape 10:06: Elliot Skierszkan – Geogenic Groundwater Considerations 10:14: Sarah Dickson-Anderson – Private Water Well Management 10:22: Questions and Panel Discussion
10:45 – 11:15 AM	Refreshment break
Networking Opportunities, Poster Viewing	
11:15 – 12:30 PM	Poster session
12:30 – 1:30 PM	Lunch and refreshments
1:00 – 1:15 PM	Luncheon speaker – Terry Duguid, Member of Parliament and Parliamentary Secretary to the Minister of Environment and Climate Change
Thematic and Topical Panel Discussions, Lightning Talks	
1:30 – 1:45 PM	Poster lightning talks (Chair: Nancy Goucher) Anastasia Sniderhan, Zhibang Lv, Lijie Guo, Jorge Garcia Hernandez, Yi Wang
1:45 – 2:45 PM	Changing Forested Basins (Convener: Altaf Arain) 1:45: Jennifer Baltzer – Canadian Forests and Wildfires 1:52: Erin Nicholls – Northern Forests - Advancement and Outcomes 1:59: Altaf Arain – Southern Forests - Advancement and Outcomes 2:06: Richard Petrone – Western Forests - Advancement and Outcomes 2:13: Sean Carey – Land Restoration and Reclamation 2:20: Logan Fang – Forest Hydrology and Modelling 2:27: Questions and Discussion
2:45 – 3:15 PM	Refreshment break
3:15 – 4:15 PM	Changing Lakes, Ponds, Wetlands (Conveners: Nandita Basu, Philippe Van Cappellen) 3:15: Philippe Van Cappellen – Climate change, anthropogenic pressures and lake dynamics 3:24: Phil Loring – Drainage of prairie wetlands: governance challenges 3:33: Helen Baulch – Adapting and mitigating lake algal blooms 3:42: Chris Spence – Managing waters in the Canadian prairies 3:51: Nandita Basu – Climate change, phosphorus legacies and management strategies 4:00: Questions and Discussion
4:15 – 4:30 PM	Poster lightning talks (Chair: Monica Morrison) Ali Reza Shahvaran, Md Abdus Sabur, Mahyar Shafii, Jovana Radosavljevic, Stephanie Slowinski, Lewis Alcott, Yichun Huang
Networking Opportunities, Poster Viewing	
4:30 – 5:00 PM	Poster session
Reception, Poster Viewing, and Banquet Dinner	
5:00 – 6:00 PM	Cash-bar reception and poster viewing / networking
6:00 – 8:00 PM	Banquet Dinner
6:45 – 7:05 PM	Dinner speaker – Thon Phommavong, Vice President, Science and Licensing Division, Saskatchewan Water Security Agency
8:00 PM	Bus departing TCU Place and returning to USask residence
GWF Young Professionals Social Event	
8:00 – 10:00 PM	YP social event at Winston's Pub, 243 21 st Street East
10:00 PM	Bus departing Winston's and returning to USask residence

Wednesday, May 17 (Times are in Central Standard Time)

7:35 AM sharp	Busses depart from USask residence to TCU Place
7:00 – 8:30 AM	Arrival and breakfast
Thematic and Topical Panel Discussions	
8:30 – 9:30 AM	Observatories, Observations and Sensors (Conveners: John Pomeroy, Aaron Fisk) 8:30: John Pomeroy – Global Water Futures Observatories (GWFO) 8:40: Aaron Fisk – Realtime Aquatic Ecosystem Observation Network (RAEON) 8:50: Kiana Zolfaghari – Transformative Sensor Technologies and Smart Watersheds (TTSW) 9:00: Madison Harasyn – UAV Remote Sensing 9:05: Stephen O’Hearn – Data Management and GWFNet 9:10: Debajyoti Mondal – Data Visualization 9:15: Questions and Discussion
9:30 – 9:45 AM	Poster lightning talks (Chair: Nancy Goucher) Weijia Cui, Emil Sekerinski, Sara Eager, Morteza Behbooei, Zemichael Workneh, Kurt Belcher
9:45 – 10:45 AM	Changing International Water (Conveners: Al Pietroniro, Corinne Schuster-Wallace) 9:45: Al Pietroniro – Introduction to Planetary Water Prediction 9:50: Okan Aygun – Syr-Dharia Modelling – A looming Central Asian Water Crisis 10:00: Fred Wrona – UNESCO Chair in Mountain Water Sustainability 10:10: Corinne Schuster-Wallace – Women Plus Water 10:20: John Pomeroy – UN Water Initiatives 10:30: Questions and Discussion
10:45 – 11:15 AM	Refreshment break
Thematic and Topical Panel Discussions	
11:15 – 12:15 PM	Human Dimensions (Chair: Phil Loring) 11:15: Introduction to panel 11:20: Panel Discussion Panelists: Lori Bradford, Roy Brouwer, Graham Epstein, Jaclyn Porter, Graham Strickert 12:00: Audience Q&A
GWF Final AOSM Closing Statement and Remarks	
12:15 – 12:45 PM	GWF Meeting Statement by John Pomeroy and Corinne Schuster-Wallace Closing remarks from Anthony Blair Dreaver Johnston and Dawn Martin-Hill on behalf of the GWF Indigenous Engagement Committee Closing remarks by John Pomeroy and Corinne Schuster-Wallace Meeting closing by Elder Roland Duquette
12:45 – 1:45 PM	Lunch and refreshments
Poster cleanup and departure	
GWF Young Professionals Field Excursion	
1:30 PM	Bus departs to St. Denis National Wildlife Area
2:20 – 3:30 PM	Field visit at St. Denis
3:30 PM	Bus departs to take YPs to TCU Place and Saskatoon Airport