Field	Response
1. Contact Information | Name	Martin Ross
1. Contact Information | Department	Earth and Environmental Sciences
1. Contact Information | Email	maross@uwaterloo.ca
1. Contact Information | University	Waterloo
1. Contact Information | Personal Web Page	https://uwaterloo.ca/earth-environmental-sciences/people-profiles/martin-ross
1. Contact Information | Phone	x.38171
2. Please indicate the alignment of your research expertise to one or more of the following GWF objectives/ deliverables:	Predict water futures – use Big Data to make informed decisions, better models to assess change in human/natural land and water systems
3.1 Please indicate the alignment of your research expertise to the GWF Science Pillar 1 – Diagnosing and Predicting Change in Cold Regions:	Hydrology and Terrestrial Ecosystems – improve understanding and prediction of hydrological and terrestrial processes and watershed hydrology and how processes and systems will evolve and interact under a changing climate
3.2 Please indicate the alignment of your research expertise to the GWF Science Pillar 2 – Developing Big Data and Decision Support Systems:	Decision Support Systems – predictive and diagnostic modelling system development and deployment for hydrology, water quality and water resources
3.3 Please indicate the alignment of your research expertise to the GWF Science Pillar 3 – Designing User Solutions:	Energy & Natural Resources – including mining and hydroelectricity

Field	Response
4. Please indicate the alignment of your research expertise to one or more of the following user needs:	Model development to support climate change impact assessment, including regional climate change modeling, hydrological and ecological modeling, specifically involving improvements in forecasting and predictive capacity, downscaling, and scenario development of water futures. Complex system modeling and analyses reflect the growing awareness of interacting dynamics in human-natural coupled systems. These studies emphasize the inter-relationships between water resources and transportation systems, infrastructure, energy generation, mining, food production, and source water protection.
5. Please list regions of Canada and the biomes (e.g. mountains, boreal forest, Great Lakes-St Lawrence), watersheds, and/or river basins where you are interested in conducting research for GWF:	All regions are of potential interest.
6. Please list any other expertise or recent experience (subjects, river basins, technology) not covered by above query that could help us in assessing your alignment with the GWF programme:	Porous media (geology), 3D geomodelling (spatial analysis of surface and subsurface data), Earth surface processes, glaciers