Field	Response
1. Contact Information | Name	Marek Stastna
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1. Contact Information | Phone	519 888 4563 ext 33529
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:	Hydrometeorology and Climate Change – improve understanding and prediction of how climate change influences water availability and extreme events Water Quality and Aquatic Ecosystems – improve understanding and prediction of how climate changes in climate, hydrology, and land use impact water quality and the health of aquatic ecosystems

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3.2 Please indicate the alignment of your research expertise to the GWF Science Pillar 2 – Developing Big Data and Decision Support Systems:	Big Data for Water – sensors, sensing, instrumented river basins, data analysis systems
3.3 Please indicate the alignment of your research expertise to the GWF Science Pillar 3 – Designing User Solutions:	Water Environment – ecosystem health and conservation, water management Energy & Natural Resources – including mining and hydroelectricity
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.
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:	I am a modeller so my research does not need to be tied to particular regions. I have most experience in the hydrodynamics of the coastal ocean and mid–sized lakes.
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:	I have served as Associate Dean Computing for the past three years and I have some ideas about how to use Compute Canada and other resources more efficiently to facilitate next generation big data analysis.