Field	Response
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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 Inform adaptation to change and risk management - propose governance mechanisms, management strategies, and policy tools to reduce the risk of water threats, design adaptive strategies, and enhance economic opportunities
3.1 Please indicate the alignment of your research expertise to the GWF Science Pillar 1 – Diagnosing and Predicting Change in Cold Regions:	
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:	Projects to improve environmental monitoring, including sensors, drones, satellites, river basin observatories, lake buoys, software development, chemical fingerprinting, real-time monitoring, citizen science, and integration of Big Data platforms for Cold Region water science.

Field Response

- 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:
- 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:

**Great Lakes** 

St. Lawrence

Night Hawk Lake and Timmins watershed areas Wanapitei Lake and Sudbury watershed areas Lake Nipissing and North Bay watershed areas

technologies development:

- membranes
- integrated membrane sensors
- advanced sorbents for extreme pollution events (pollutant spills, turbulent mixing from floods, mine tailing releases)