



The Arctic Institute of North America presents the 2020 – 2021

# Arctic Speaker Series

## What +1.5°C Average Global Warming Means for Canada's Arctic

**Speaker:**

Tricia  
Stadnyk

**Date:**

Thursday,  
December 17, 2020

**Time:**

12:00 – 1:00 pm  
Mountain Time

**Location:**

[Live Stream on YouTube](#)



Canada is experiencing some of the most accelerated climate-driven change in the world, which has resulted in significant changes to freshwater river discharge. With more than 60% of Canada's water draining North, this has direct implications for the Arctic marine system, and subsequent global ocean circulation. Using state-of-the-art integrated models, science is now beginning to explore the challenges imposed by a changing climate across continental and global scales, including changes to high-latitude hydrology and frozen landscapes. At the same time, new sources of 'big data' are helping scientists to understand and observe, in near real time, the consequences of global warming for Arctic systems. Crucial to our capability to adapt and mitigate climate change in the North is our ability to predict the cumulative impacts of changes that are occurring, and their implications for vulnerable ecosystems.

**Biography:** Dr. Tricia Stadnyk is a Tier II Canada Research Chair in Hydrologic Modelling and an Associate Professor with the Department of Geography at the University of Calgary, and a Professional Engineer registered in the Provinces of Manitoba and Alberta. Her research looks at continental scale water supply under climate change through three main foci: development of enhanced data networks to support hydrologic modelling, development of integrated modelling tools for climate change and risk-based uncertainty assessment, and pan-Arctic system science using Earth System Models. Internationally, she is the Chief Scientific Investigator (CSI) on a Coordinated Research Project to improve global water balance estimation and the newly elected Vice President of the International Association for Hydrological Sciences Tracer Commission. In Canada, she is lead investigator responsible for several projects within the Global Water Futures, FloodNet and BaySys Research Networks, contributing to the development of new tools for simulating continental Canadian water supply.

This event is **free and open to the public**

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