



POST-DOCTORAL FELLOWSHIP IN ENVIRONMENTAL FLOWS FOR NORTHERN RIVERS WITH THE CANADIAN RIVERS INSTITUTE (UNB) AND THE GLOBAL INSTITUTE FOR WATER SECURITY (U OF S)

Global freshwater resources are under increasing threat from human activities, both in terms of consumptive and non-consumptive use. Increasing societal demands for water have led to substantial flow alterations in rivers, both in Canada and internationally. Environmental flows describes the quantity, quality, and timing of water flows required to sustain freshwater ecosystems and human livelihoods and well-being dependent upon these ecosystems (Brisbane Declaration, 2007). However, the application of environmental flows is highly variable across Canada with limited attention to northern rivers where basins are remote, poorly instrumented, and influenced by cold-region processes.

We are seeking a post-doctoral fellow to be part of the interdisciplinary Integrated Modeling Program for Canada (<https://gwf.usask.ca/imp/index.php>) who will focus on the development and application of novel ecohydrological indicators for northern rivers and deltas, and identify critical features of flow regimes that enable functional ecosystems. In particular, the fellow will explore big data approaches to ecohydrological analysis, adapt an eco-engineering decision scaling model to quantify links across different models, and link these features with policy prescriptions.

We are particularly interested in individuals who combine significant experience with large, multidisciplinary datasets and multivariate statistics (including R), strong geospatial analysis skills, and have the ability to develop novel tools for environmental flow assessment. Ability to work with diverse groups of experts, including First Nations and Métis communities, government and industry scientists and academics would be considered an asset.

The position is for two years and will be based at the University of New Brunswick's Fredericton campus. The successful candidate will be supervised by Dr. Wendy Monk (Environment and Climate Change Canada), Dr Donald Baird (Environment and Climate Change Canada), and Dr. Allen Curry (University of New Brunswick) who are based at the Canadian Rivers Institute, University of New Brunswick, and Dr. Tim Jardine (University of Saskatchewan).

The position is open now, and will be staffed as soon as a suitable candidate is identified. Please email an application stating your research interests and experience together with a CV (including contact emails of three referees) by May 4, 2018 to Dr. Wendy Monk at wmonk@unb.ca.