



UNIVERSITY OF SASKATCHEWAN

Global Water Futures

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Prairie WaterSave is a project funded by the Global Water Futures Program at the University of Saskatchewan that focuses on improving sustainable water management and enhancing water resilience under a changing climate for Prairie communities. The project is looking to fill several student and management positions.

### **Prairie WaterSave Project Manager**

The project manager position provides scientific and logistic support to the Prairie WaterSave project and its members. This will involve liaising with Canadian academic and government scientists and community partners. Duties will include providing technical and other support to the Project's Principal Investigator, the Scientific and Advisory Committees, and a wide range of stakeholders in developing, implementing and reporting for an integrated research programme. For more information, contact Dr. Christopher Spence ([chris.spence@canada.ca](mailto:chris.spence@canada.ca)).

### **Postdoctoral (PDF) appointment - Hydrological Modelling of Prairie Watersheds**

We invite applications for a post-doctoral fellowship in the field of hydrological modelling of Canadian Prairie watersheds. The fellow will be applying the University of Saskatchewan's Cold Regions Hydrological Modelling (CRHM) platform to model several representative Canadian Prairie watersheds. The model results produced by this position will help the programme reach its scientific and knowledge mobilization goals. For this reason, this appointment will require an ability to quickly learn the modelling platform and produce model outputs. It will be an asset to have worked successfully in a team of researchers across multiple projects and disciplines. The successful applicant will have strong knowledge of cold regions hydrology, excellent computational and programming skills and previous experience in numerical hydrological modelling. This research will apply in-situ data from a network of research catchments, remotely sensed data and hydrometeorological model products, so experience with efficient data compilation and parameter estimation is an asset.

Interested applicants are encouraged to contact Dr. John Pomeroy ([john.pomeroy@usask.ca](mailto:john.pomeroy@usask.ca)) or Dr. Christopher Spence ([chris.spence@canada.ca](mailto:chris.spence@canada.ca)) with a copy of their CV, resume and a cover letter. Postdoctoral fellows will hold their academic appointment with the Centre for Hydrology, Department of Geography and Planning ([www.usask.ca/hydrology](http://www.usask.ca/hydrology)). This is a two year appointment with possible extension to a third year and has a competitive salary.

## **Post Doctoral Fellow (PDF) opportunity – Economics and Policy of Prairie Wetland Management**

This research will focus on the management, conservation, retention and restoration of prairie wetlands in western Canada with a focus on integrating costs and benefits of alternative wetland management with information on wetland functions to inform policy options in target landscapes.

Applicants will work closely with Dr. Ken Belcher, Department of Agricultural and Resource Economics, but will be expected to interact with the broader multi-disciplinary project team and partners in government and industry. Prior experience with modelling of economic processes and ecosystem service valuation will be considered necessary, experience with spatially explicit data and geographic information system (GIS) databases will be considered an asset. Interested applicants should contact Dr. Ken Belcher ([ken.belcher@usask.ca](mailto:ken.belcher@usask.ca)).

## **Post Doctoral Fellow (PDF) or Research Associate opportunity – Water Governance in the Canadian Prairies**

The Postdoctoral Fellow or Research Associate will be responsible for understanding narratives that drive water governance, decision making and policy on the Canadian Prairies. The appointment must have comprehensive understanding of integrative social science methods including: social network analysis, surveys, interview, focus groups, and fuzzy cognitive maps. Preference will be given to candidates with a track record of interdisciplinary scholarship and the ability to cultivate empathy among people with diverse views. For more information, contact Dr. Graham Strickert ([graham.strickert@usask.ca](mailto:graham.strickert@usask.ca)).

## **PhD opportunity - Contributing Area and Streamflow Dynamics**

With a combination of field and modelling studies, we aim to evaluate the Prairie contributing area-streamflow relationship and determine the influence of geomorphology, climate and wetland distribution. This research will contribute to knowledge that will inform land management decisions as it pertains to sustainable water management and water and nutrient transport to Lake Winnipeg.

Applicants will work most closely with Drs. Christopher Spence and John Pomeroy, but are expected to interact closely with the broader project team, and our partners in government and communities. Prior experience in cold regions hydrology, unmanned aerial systems and conducting field and modelling based work, will be considered an asset. Interested applicants should contact Dr. Christopher Spence ([chris.spence@canada.ca](mailto:chris.spence@canada.ca)).

### **MSc/PhD/PDF opportunity – Nutrient Biogeochemistry of Prairie Pothole Wetlands**

We aim to assess patterns of nutrient chemistry within wetlands of the prairie pothole region, and to quantify the role of key biogeochemical processes as contributors to nutrient retention. The successful applicants will work with existing data, and launch new field and lab- based investigations using a combination of standard methods and advanced instrumentation.

Applicants will work most closely with Drs. Helen Baulch, Angela Bedard-Haughn and Colin Whitfield, but are expected to interact closely with the broader project team, and our partners in government and communities. Prior experience in biogeochemistry, water, sediment and/or soils, and conducting field or laboratory based work, will be considered an asset. Expressions of interest in the position can be sent to Dr. Colin Whitfield ([colin.whitfield@usask.ca](mailto:colin.whitfield@usask.ca)).

### **MSc opportunity – Prairie Hydrogeology**

We aim to assess sustainability of groundwater development in the Canadian Prairies by developing an understanding of recharge and discharge processes and aquifer architecture. The successful applicant will work with existing data and data collected from targeted field studies to produce statistical and numerical models of aquifer systems in the region.

Applicants will work most closely with Drs. Grant Ferguson and Masaki Hayashi, but are expected to interact closely with the broader project team, and our partners in government and communities. A background in hydrogeology, along with an undergraduate degree in geoscience, geological engineering or related field is required. Interested applicants should contact Dr. Grant Ferguson ([grant.ferguson@usask.ca](mailto:grant.ferguson@usask.ca)).