



Prairie Water 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.

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).

MES 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).

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).