

MSc Studentship Opportunity – Dynamics of Variable Contributing Areas for Runoff Generation from Canadian Prairie Basins

The [Centre for Hydrology](#) in the Department of Geography and Planning at the **University of Saskatchewan** invites applications for a **fully funded MSc studentship**. Start dates are flexible: Fall (September) 2026 or Winter (January) 2027

About the Position:

The contributing area for runoff generation in the Canadian Prairies has long been known to be difficult to estimate and critically important for estimating streamflow and nutrient loading from prairie basins. It has been mapped over the prairies as a static value but is known to be extremely dynamic due to changes in runoff, depressional storage and connectivity. The student will use the results of the Global Water Futures – Prairie Water Project and other research to estimate the variable contributing area using algorithms developed in the Centre for Hydrology. The student will show and visualize how the contributing area expands in wet years and declines during droughts and to what degree it is impacted by wetland drainage and climate change. The MSc student will be supervised by [Distinguished Professor John Pomeroy](#) in the Department of Geography and Planning at the University of Saskatchewan.

Required qualifications:

- Bachelor's degree in Geography, Hydrology, Environmental Earth Science, Engineering (or a closely related field).
- Strong academic performance (GPA $\geq 80\%$).
- Computational and GIS skills.
- [English proficiency](#).
- Strong written communication skills and research ability.

Familiarity and experience with Canadian Prairie Hydrology is an asset.

How to Apply:

Please send a **single PDF** with the subject '**MSc Prairie Hydrology**' to Dr. John Pomeroy at centre.hydrology@usask.ca. Your application must include:

1. A one-page cover letter describing your interest in this studentship: your research interests, experience, motivation, availability dates, and career goals
2. Curriculum vitae (including academic achievements, scholarships, or awards)
3. Unofficial transcripts and copies of your bachelor's degree.

Review of applications will begin immediately and continue until the position is filled. Successful candidates will be recommended to apply for admission to the MSc program of the Department of Geography and Planning.