

Postdoctoral Fellow: Ecosystems Services and Agricultural Drainage in the Prairies
(ResNet L3-PDF 1)

Salary: \$45,000/year + benefits

Duration: 2 years

Start Date: early 2020 (negotiable)

Location: University of Saskatchewan

Supervisors: Dr. Helen Baulch, University of Saskatchewan and Dr. Phil Loring, University of Guelph

We are seeking a talented Postdoctoral Fellow to lead integrative work on modelling ecosystem services in the Canadian Prairies. This work is aimed at creating simulations of the responses of varied ecosystem services to changing wetland coverage and climate.

The successful candidate will work across ResNET and Global Water Futures researchers to integrate ecosystem services into existing hydrological modelling tools (virtual basins), supported by a strong cohort of collaborating hydrological modellers, biogeochemists, and ecologists engaged in work on biodiversity, nutrient cycling and transport, carbon storage, GHG release, and water-related risks.

This position is funded by the Natural Sciences and Engineering Research Council of Canada (NSERC) Strategic Partnership Grants for Networks. The PDF will join the team of the newly funded NSERC ResNet: A network for monitoring, modeling, and managing Canada's ecosystem services for sustainability and resilience and work within the Global Institute for Water Security, linking closely with Global Water Futures researchers, and partners.

This position is for 2 years, and will be based out the University of Saskatchewan.

Expected outcomes include:

- Work with a diverse team (including non-governmental organizations) to modify existing ecosystem services models to simulate responses to changing wetland coverage and climate focused on the following ecosystem services: food production, flood mitigation, water quality, wildlife habitat and recreation, and carbon storage.
- Leadership of multiple manuscripts detailing model development, results of past climate, past land use change, and uncertainty across ecosystem services simulations.
- Collaborative outputs associated with other areas of the landscape and ResNET research programs, and participation in project workshops, relevant conferences, and training opportunities.

Applicants must have completed a Ph.D. in a relevant discipline and have primary publications in refereed journals or a dissertation which suggests submission-ready outputs. We require strong numeric abilities, fluency in written and spoken English, the ability to work cooperatively with supervisors and collaborators, and strong communication and organizational skills.

The ideal candidate would have either hydrological modelling experience or some background in hydrology, experience working with multi-stakeholders and multiple ecosystem services, as well as experience working in an interdisciplinary team on complex water issues.

To apply, please send a cover letter describing your research background, interests, and qualifications; two example publications demonstrating your relevant research experience; plus, a complete curriculum vitae and contact information for at least two references to sam880@usask.ca

Application deadline: January 10, 2019. Any applications received after the deadline will only be considered if the position is not filled. Only short-listed candidates will be notified