

**Post-doctoral position to model water quality in six target watersheds of Lake Ontario (for the GLAP V project)**

Applications are invited for a 3-year Post-doctoral fellowship for integrated watershed modeling of hydrologic and water quality processes in the Toronto and Region Area of Concern watersheds. Based on the advanced application of similar modeling tools at the nearby pilot watershed (Duffins Cr. with SWAT) and in collaboration with the Toronto and Region Conservation Authority (TRCA), a similar modeling system will be implemented in the AOC watersheds to help in the decision process and evaluation of water quality delivered to receiving waters (Lake Ontario) due to agricultural activities and municipal infrastructure. In collaboration with the University of Guelph the post-doc will leverage assistance on the project with the new U. of Guelph Can-SWAT version of SWAT which better simulates winter snow distribution and frozen soil for Canadian conditions. The position would ideally be located at the University of Guelph though location at the Canada Centre for Inland Waters in Burlington will be considered.

The PDF will focus on two broad aspects of agri-environmental water quality modeling. First, scenarios of land-use change and BMP implementation will be developed to cover a wide spectrum of policy options. Second, non-point source water quality modeling (e.g. SWAT) will be used to simulate and evaluate how the scenarios affect nutrient and sediment loading to receiving waters to identify optimal land use and agricultural land management strategies. Applicants should have a PhD in a relevant area of environmental science such as hydrology, physical geography or civil engineering. Knowledge of geographical information systems, non-point source water quality models, field instrumentation and statistical techniques for data acquisition and data analysis are essential.

Applicants should send a CV, a 1-page summary of research/career interests and a list of three references to Dr. Bill Booty. Applications will be accepted until the position is filled. Electronic submission is encouraged ([bill.booty@ec.gc.ca](mailto:bill.booty@ec.gc.ca)). For additional information please contact:

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