

H11: Hydro-ecological and hydrogeomorphic impacts of forest disturbance and management

Conveners: Jim Buttle¹, Irena Creed² and Brett Eaton³ and Dan Moore⁴
Co-chairs: Jim Buttle¹, Irena Creed² and Brett Eaton³ and Dan Moore⁴

¹ Department of Geography, Trent University, Peterborough, ON, K9L 0G2, Phone: 905-435-5100, Fax: 705-748-1205, E-mail: jbuttle@trentu.ca

² Department of Biology, Western University, London, ON, N6A 5B7, Phone: 519-661-4265, Fax: 519-661-3935, E-mail: icreed@uwo.ca

³ Department of Geography, University of British Columbia, Vancouver, BC, V6T 1Z2, Phone: 604-822-2257, Fax: 604-822-6150, E-mail: brett.eaton@ubc.ca

⁴ Department of Geography, University of British Columbia, Vancouver, BC, V6T 1Z2, Phone: 604-822-3538, Fax: 604-822-6150, E-mail: dan.moore@ubc.ca

Session Description

Changes in forest cover associated with forest management and natural disturbance can have profound influences on hydrologic processes, nutrient cycling, sediment transport, channel morphology, water quality and aquatic habitat. It is important for managers and decision-makers to understand the nature of these changes in order to anticipate how they will influence ecosystem services. However, it is difficult to isolate the effects of forest cover change from background climatic variability, especially in the context of ongoing climate change and legacy effects of historic harvesting practices and past disturbances. This session aims to provide a platform for presenting research that provides new insights into the hydrologic, hydro-ecological and hydrogeomorphic consequences of forest cover changes at all spatial scales, from small plots to large regions, based on field research, empirical analysis of hydroclimatic data sets and simulation modelling. In addition to fundamental research on topics such as the effects of forest succession on water and nutrient budgets, we welcome presentations based on applied research, such as experimental studies of alternative riparian management impacts on water quality and aquatic habitat, or the effects of roads on runoff generation or sediment budgets.

Primary Affiliation: Hydrology, Biogeosciences, Earth Surface Processes