

CGU_E_02: Resiliency and Rivers

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Session Description:

Changing land use, climate variability pressures, and increased issues with regards to erosion and flood hazards demands that water courses need attention. Furthermore, legislation like the species-at-risk act in Ontario, require that watercourses provide suitable habitat in order to preserve and encourage thriving aquatic communities. The core concepts of fluvial geomorphology, from watershed scale to microhabitat scales, hydraulics, fluid mechanics, and sediment dynamics are fundamental to maintaining and developing resilient systems. This session invites presentations that explore concepts and aspects of resiliency in natural and modified water courses, and can include field, laboratory and numerical modelling examples of on-going research. We are interested in showcasing studies from the entire range in environments (e.g., urban systems, alpine systems, agricultural, forested sites), multi-year studies, stories from the trenches (e.g., that field experiment that just didn't follow the plan, and ones that did), and innovative techniques (e.g., flume experiments, UAV surveys, adapted numerical models). Abstracts for this session should be sure to identify and connect with key themes and concepts related to resiliency, including connectivity, ecohydrology, water quality, and natural channel design.

Primary Affiliation: CGU, Earth Surface Processes

Joint Session Submission: none