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"Our environment is our future"

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RESEARCH COLLOQUIUM SERIES



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HYDROLOGICAL AND GEOMORPHOLOGICAL RESPONSE OF WATERSHEDS TO WILDFIRE

Wildfires represent one of the major natural disturbances within forested landscapes and have implications for the quality and function of downstream aquatic ecosystems and water resources. Given the anticipated increase in the number and severity of wildfires associated with future climate changes and associated human activities, there is a requirement to investigate landscape responses to wildfire in contrasting environments. This has been identified as an important research need within the watershed and forest management communities. From a hydrological and geomorphological perspective, there is a research interest in how wildfire-affected landscapes respond and recover to such disturbance events, including: the role of the wildfire event itself; and how subsequent hydrometeorological and vegetation changes influence post-fire processes. This presentation will describe work examining the hydrological and geomorphological response of Fishtrap watershed, near Kamloops, to the 2003 McLure wildfire. The talk will focus on water flows and sediment fluxes over the period 2004 to 2011, but will also discuss changes in channel morphology. Findings suggest that the response is not just a function of the severity of the wildfire.



