

Name: **Morgan Wright**

SFU faculty/major: Faculty of Environment/Environmental Science

Title of presentation: The Fraser Canyons: An Exploration of Width and Depth Relations

Abstract

The width and depth of rivers are generally inversely related. For a given discharge, wider rivers are shallower than narrower rivers, which are correspondingly deeper. At a river scale, past research largely supports the claim that the width of a bedrock channel is expected to be similar to that of an alluvial river with the same drainage area but narrower than that of an alluvial channel with the same discharge. However, when examined at the reach scale, river sections confined by bedrock on both banks have been suggested to be consistently narrower and deeper than the surrounding alluvial reaches. Building off of past research by using a more detailed data set to explore the covariation in width and depth values, as well as exploring this covariation on a canyon to canyon basis, I intend to demonstrate that bedrock reaches are consistently narrower and deeper than their alluvial counterparts.