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*Suspended sediment generation processes during the ablation season at Castle Creek Glacier*

In British Columbia, 20 % of the watersheds have enough glacial coverage to influence the quantity, quality, and timing of water and sediment delivered to downstream ecosystems. Glaciers have been receding since Little Ice Age, and will continue to recede under current climate projections. The effect of deglaciation on water resources has received more attention than the effect on sediment flux. However, both water and sediment have important implications for downstream infrastructure and ecosystems. As glaciers recede, highly erodible unconsolidated sediment is exposed in the proglacial zone. During glacial recession, sediment flux is expected to increase. As watersheds become deglaciated, available sediment may become transport limited due to a decreased contribution of glacial meltwater to stream flow. Additionally, proglacial sediment generation processes change over time as result of winnowing of fines and surface stabilization. In order to project future sediment flux, my research aims to quantify current fine sediment generation processes, as well as the temporal effect on sediment availability in the proglacial zone of the Castle Creek Glacier; which is an upper tributary of the Fraser Basin in the Cariboo Mountains of British Columbia.