



Management of sediment and erosion processes in boreal headwaters affected by peatland drainage

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ABSTRACT

Peatland drainage for forestry, agriculture, peat harvesting and urban infrastructure has been altered landscape in Finland. Pristine peatlands and headwaters provide important hydrological and ecological functions that can be lost after drainage. The drainage has resulted in increase of forest resources but also negative environmental effects including changes in runoff, erosion processes, siltation and eutrophication. The changes that can occur after drainage are, however, complex and must be better understood if the negative impacts of drainage are to be reduced or prevented. Especially erosion and transport processes of organic peat sediment are not well understood (Marttila and Kløve, 2008). Methods for controlling the sediment load include erosion and transport control practices in the catchment area (Marttila and Kløve, 2009; Tammela et al. 2009). The presentation/poster will present methods and preliminary results project from Northern Finland. The issues especially covered are sediment erosion and transport and methods to restore and reduce impacts of peatland drainage in boreal headwaters.

Keywords: sediment transport, erosion, peatland drainage, organic and inorganic sediment, stream and catchment restoration, management, environment

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