

Smith, Mark. A descriptive analysis of post-fire mitigation measures for steep slopes: A case study of Cape Town's mudslide and mountain flood risk mitigation programme following vegetation fires in 2006. (BSc Honours thesis in Disaster Risk Science, 2007)

The January 2006 denudation by fire of certain mountain slopes above built up areas in the City of Cape Town created a significant threat of flooding and mudflows in those areas during the subsequent winter rainfall months. This risk required the implementation of mitigation measures on the exposed slopes. Adopting the Pressure and Release model described by Wisner *et al* (2004) this case study investigates integrated risk reduction interventions in relation to mudflow-prone areas located along urban fringe areas above Camps Bay and below Lion's Head, which are exposed to extreme weather events. Tracing the progression of vulnerability of residents and infrastructure vulnerable to the threat of mudflows, then applying the progression of safety, the study investigates the relative effectiveness of the selected mitigation interventions and strategies, which ensured that the risk of damage to storm water infrastructure and property was drastically reduced. Although the mitigation programme led to a reduction in vulnerability prior to the winter rains of that year, this has yet to be tested under severe conditions. The study recorded a subsequent lack of general maintenance which could greatly reduce the effectiveness of the mitigation measures in the future.