

Paper Title: Natural terrain management criteria - Hong Kong practice and experience

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Abstract:

Different approaches are being applied for assessment of natural terrain landslide hazards in Hong Kong. The use of Quantitative Risk Assessment in risk management and Design Event methodology in hazard mitigation is notable. Susceptibility analysis and zoning have been carried out at 1:20,000 scale for the whole of Hong Kong, and at 1:5,000 or larger scales in selected regions. However, their resolution, despite the use of good quality data and techniques, are generally not adequate for direct application to landslide risk management. As an alternative, suitably conservative, principally consequence-based hazard screening criteria are adopted on a case-by-case basis in the land and development management process. In area-based and site-specific applications, typically at 1:2,000 scale or larger scales where evaluation of potential landslide events, runout modeling and consequence assessment can be practically and reliably carried out, hazard analysis and quantified risk zoning would give useful results. These results have been adopted in landslide risk management at a site-specific level.