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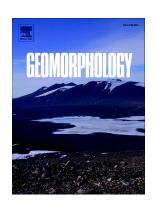
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Geomorphology and forest management in New Zealand's erodible steeplands:

An overview

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Abstract

In this paper we outline how geomorphological understanding has underpinned forest

management in New Zealand's erodible steeplands, where it contributes to current forest

management, and suggest where it will be of value in the future. We focus on the highly erodible soft-

rock hill country of the East Coast region of North Island, but cover other parts of New Zealand where

appropriate. We conclude that forestry will continue to make a significant contribution to New

Zealand's economy, but several issues need to be addressed. The most pressing concerns are the

incidence of post-harvest, storm-initiated landslides and debris flows arising from steepland forests

following timber harvesting. There are three areas where geomorphological information and

understanding are required to support the forest industry — development of an improved national

erosion susceptibility classification to support a new national standard for plantation forestry; terrain

analysis to support improved hazard and risk assessment at detailed operational scales; and

understanding of post-harvest shallow landslide-debris flows, including their prediction and

management.

Keywords: East Coast; erosion processes; forest management; landslides, terrain zoning

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