



Report **06.453**
Date 4 September
File WO/03/40/10

Committee **Rural Services and Wairarapa**
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Land Management – July 2006 Storm Damage Report

1. Purpose

To inform the Committee about the nature of the storm, the effect on the Wairarapa hill country, and the impact on Land Management services.

2. Background

During the period 4-7 July, two storms brought widespread rainfall to the Wellington region. The rainfalls produced over the three day period were highest in the eastern Wairarapa hills and Aorangi ranges. Unconfirmed rainfall totals in eastern Wairarapa, near Hinakura, to the east of Martinborough, exceeded 400mm. The estimated return period of rainfall in this area is 80 years.

Totals from automatic gauges indicate at least 330 mm fell in the Aorangi Range, 247 mm at Stoney Creek, 190 mm at Ngaumu Headquarters, and 162 mm in the headwaters of the Tinui River.

Within this pattern there were a number of high intensity cells of rain. Private recordings would indicate that short duration intensities of 25 mm per hour were not uncommon. During the following two weeks a further 225 - 250 mm fell across most of the Wairarapa hill country causing more damage as a result of saturated soil conditions. The presentation of John Dalziell at the last meeting has adequately portrayed the nature and scope of this damage.

Soils in the Tinui district were fully saturated from late April to mid August. Throughout this period of 20 weeks soils were highly vulnerable to slipping, even with small daily rainfall totals.

In the period 1 July to 30 August a total of 503 mm was recorded in the headwaters of the Tinui catchment. The average annual figure for this site is 1,315 mm. In the year to the end of August rainfall is 130% of the long term average. For some districts in the southern Wairarapa this percentage figure will be much higher as their annual rainfall is less than Tinui.

3. Incidence of Significant On-farm Damage

The accumulated rainfall shown in Figure 1. gives a clear indication of where damage occurred. Most widespread damage occurred where the three day accumulated total exceeded 200 mm. Significant isolated damage also occurred outside this zone, the result of the easterly aspect of the storm and heavy, short duration falls.

The nature of this damage varies from loss of pasture due to slips, loss of pasture due to slip deposition, loss of access, loss of fences, loss of stock, and a significant quantity of sediment reaching streams and rivers.

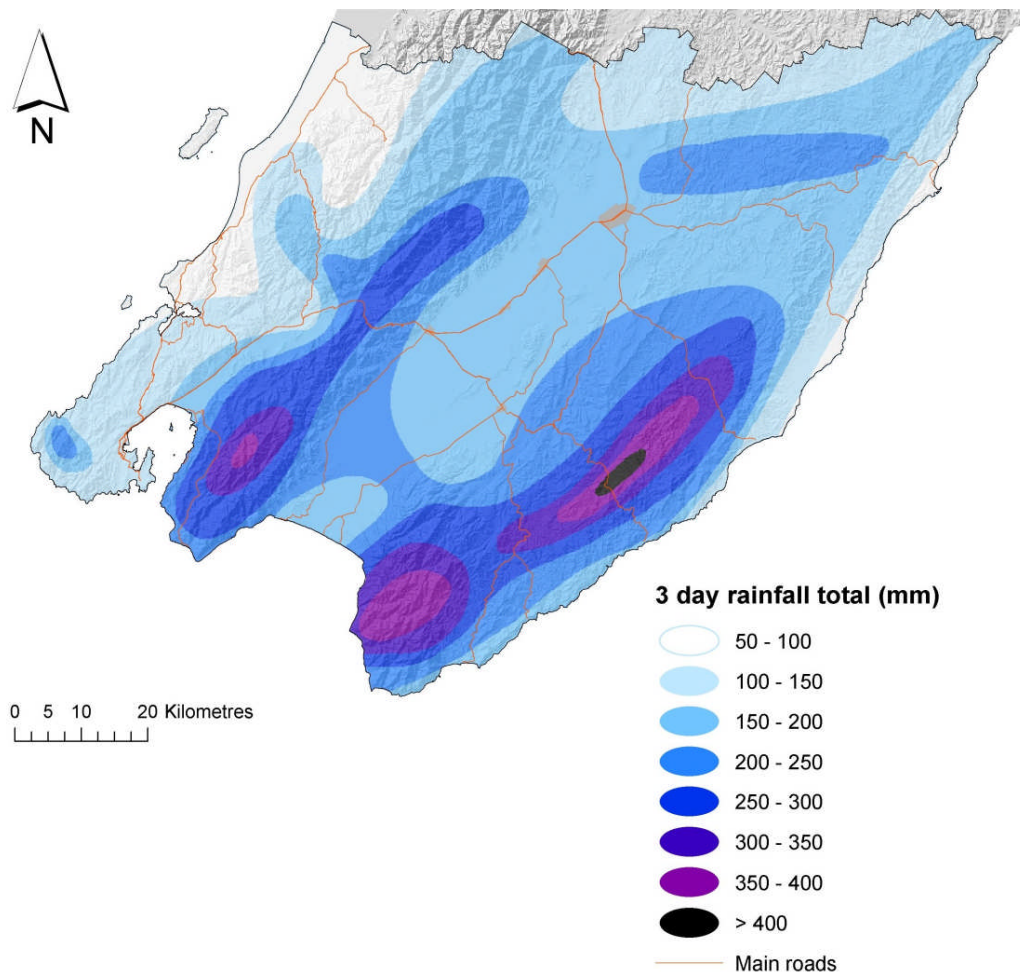


Figure 1: Accumulated rainfall from 4 -7 July 2006

Farming operations are particularly vulnerable to events of this nature at this time of the year. Ewes are set stocked for lambing, grass growth has slowed significantly, and selling surplus stock into flat, out of season markets brings reduced returns.

The types of erosion found during such events are typically shallow slips and earthflows. Both are easily controlled with the planting of spaced poplar and willow poles. Some strategic establishment of conservation woodlots may be desirable where infrastructures such as main access routes are threatened by continuing movement.

Also of concern is the area of ground that cracks open but does not subside, resulting in further vulnerability during the next period of rain.

4. Catchment Schemes

Damage to roads throughout all three Wairarapa District Councils areas has been significant. The most severe damage has occurred in southern Wairarapa. Worst hit areas include Clifton Grove Road, Hinakura Road and the Whakapuni Hill Road.

Two of these roads are located within Catchment Schemes administered by Greater Wellington. Staff have been working closely with road engineers from the respective District Councils to assess damage and where possible incorporate remedial work using Transit storm damage relief funding and Catchment Scheme funds. Recent discussions have resulted in very favourable outcomes for the Awhea Catchment Scheme, where much of the repair work is being incorporated with South Wairarapa District Councils storm damage repair bill.

Information is being collated so that Catchment Scheme Advisory Committee meetings can be held within the next two months to revise annual works programmes. In at least three of these Schemes this is likely to result in increased expenditure. This will necessitate additional contribution from Council.

Elsewhere in the Wairarapa, staff are working closely with other Councils and landowners to stabilise road platforms that are at risk from subsidence or extensive slipping.

5. Land Management response to hill country damage

The initial request from landowners has been an assessment of damage, and consideration of remedial work options. The timing of the event was such that landowners had time to arrange planting and have adequate time for successful establishment of poles. This is not the case when storm events occur any later than the end of August. In this scenario the planting programme would be undertaken the following year.

Remedial work options are centred on pole planting or the establishment of conservation woodlots. Aside from two or three new conservation woodlots, the majority of requests were related to pole planting. Requests were either to increase the number of poles already on order, initiate a new planting programme within an existing Plan, or ask for a new Plan to be prepared to allow commencement of planting in 2007.

Prior to this winter, pole numbers totalling 23,000 had been secured from Akura nursery and external sources in Christchurch and Palmerston North. Demand for poles for 2007 and beyond will increase, at a level similar to the surveyed response after the August 2004 event. Staff will assess demand over the next six months with a view to how it will be met, and develop a case for consideration at the next LTCCP.

The recent visit from MAF policy staff and ongoing dialogue with the same staff through the Land Managers forum will provide good opportunity to explore options relating to central governments role in long term sustainable use of our hill country.

6. Communications

A number of articles on the shortage of poles to meet current demand have appeared in Wairarapa printed media in the last month.

Federated Farmers are holding a public meeting at 7.30pm on Thursday 21st September 2006 in the Cody Lounge, Masterton Town Hall to discuss the issue.

Communication opportunities will arise following the outcome of the above public meeting.

7. Recommendation

That the Committee

1. *Receive the report*
2. *Note the contents of the report.*

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